

# MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER

Trade-Name Registered in the U. S. Patent Office.

VOL. LV. No. 2.  
WEEKLY.

BALTIMORE, JANUARY 21, 1909

\$4.00 A YEAR.  
SINGLE COPIES 15 CENTS.

## Manufacturers' Record.

PUBLISHED EVERY THURSDAY BY THE  
MANUFACTURERS' RECORD PUBLISHING CO.  
BALTIMORE.

RICHARD H. EDMONDS, President.  
THOMAS P. GRASTY, } Vice-Presidents.  
FRANK GOULD, }  
VICTOR H. POWER, Treasurer.  
I. S. FIELD, Secretary.

RICHARD H. EDMONDS,  
Editor and General Manager.

EDWARD INGLE, Managing Editor.

ALBERT PHENIS,  
General Staff Correspondent.

### Branch Offices:

New Orleans—1012 Maison Blanche.

New York—52 Broadway.

Boston—170 Summer Street.

Chicago—1116 Fisher Building.

St. Louis—1023 Century Building.

Subscription, - - - - - \$4 a year  
(payable in advance) to United States,  
Mexico, Cuba, Porto Rico, Hawaii and the  
Philippines.

To Foreign Countries (including Canada) in  
the Postal Union, \$6.50 a year.

[Entered at the Baltimore Postoffice as sec-  
ond-class matter.]

BALTIMORE, JANUARY 21, 1909.

### FREE-TRADE PHILANTHROPY.

Philanthropy is beginning to rear its hoary head in the demand from some quarters for free raw material for manufacturing in the United States. Its latest phase is in a statement in correspondence furnished newspapers "gratis" by the "National Forest Conservation League" of Minneapolis, that "the first step in forest conservation is to repeal the tariffs which prevent American consumers from freely drawing on the forest products of other countries." Does any man with his wits about him outside of the "National Forest Conservation League" imagine that a repeal of the tariffs upon Canadian lumber products will have any effect, as far as consumers in the United States are concerned, than the enhancing of the value of timber lands in Canada owned by great interests engaged in selling lumber products, such as wood pulp, etc., in the United States, with the incidental depression, if not the ruin, of the lumber interests of the South. The longer one studies the "conservation" movement that flared up so violently at Washington last year the more he may be inclined to the conviction that the movement is being used to further the ambitions of great special interests. The expansion of that conviction will be likely to give a black eye to movements for conservation of forest resources and other natural wealth of the country that had been maintained with some measure of success for quite a time before the remarkable "conference" at the White House. The trouble is that so many earnest folks are being fooled by having their mind directed upon one

point and forgetting that the best intentions may be artfully worked upon for the furtherance of selfish ends, and that organizations formed and supported with most altruistic purpose are the favorite means.

### LOCOMOTIVE WORKS FOR THE SOUTH.

The proposed building at Gary of a locomotive plant to employ 12,000 to 15,000 men, as reported in the MANUFACTURERS' RECORD last week, shows that the locomotive builders are wise enough to take steps to enlarge their facilities in order to meet the increasing demands of the country, which will be upon them just as soon as business returns to normal condition.

The American Locomotive Co., which is to build the Gary shops, now has 10 plants, namely, at Schenectady, N. Y.; Dunkirk, N. Y.; Pittsburg, Pa.; Paterson, N. J. (2); Providence, R. I.; Scranton, Pa.; Richmond, Va.; Manchester, N. H., and Montreal, Canada. It was formed in 1901 by combining several well-known plants in the United States, but since then additions have been made, including the Rogers Works at Paterson and the Montreal Locomotive Works. The only other very large locomotive plant in this country is that of Burnham, Williams & Co. (the Baldwin Works) at Philadelphia, which is the largest single railroad engine factory in the world. It has a capacity of more than 2700 finished locomotives per year. The great bulk of all the locomotives built on this side of the Atlantic are, therefore, produced at Baldwin's and at the various works of the American Locomotive Co.

It appears that the decision to build a plant at Gary came about owing to several considerations, one being the need for a railroad-engine building plant in the West, another being the presence of the United States Steel Corporation, with vast facilities for producing the various forms of steel and iron required for the construction of locomotives and so immediately at hand that practically no freight charges would be incurred to get them from one factory to the other, and a third was the necessity for greater locomotive manufacturing facilities to more closely keep pace with the demands of consumers in periods of rush orders for equipment. If, for instance, a railroad company in the spring, foreseeing extraordinary heavy traffic in the fall, placed orders for more engines, it could not relieve traffic congestion if it had to wait another six months to have its locomotives built. The period of freight congestion in 1906 was not without its valuable lessons.

What is now also needed is another locomotive-building plant in the South. There is one at Richmond, but, like all other factories, it experiences seasons when more orders could be accepted but for lack of capacity. Would it not be well, therefore, for the American Locomotive Co., or others, to consider carefully the advantages to be derived from the establishment of another locomotive

works at some point in the South, where most of the railroad building to be accomplished in the United States during the next 10 years is to be done? The South (including Missouri and Oklahoma as practically Southern States) built during 1908 very nearly 55 per cent. of the new railroad mileage constructed in that year in the United States, and there is every probability that this section of the country will continue during the next decade to build annually between 50 and 60 per cent. of the new mileage. This section has now more than 80,000 miles of railroad, including the construction of 1908, and yet it has large undeveloped tracts to be traversed by railroads in order that settlers may reach new land and that natural resources may be made available. Yet, with all these resources and their arguments for locomotive-building facilities, the South has only one locomotive plant, and that at its northern extremity. This section has the raw materials.

### SICILIANS FOR FLORIDA?

It is hoped that the report that the earthquake in Sicily will be made the occasion for an attempt to colonize Sicilians in Florida by wholesale is incorrect. If such a thing is seriously contemplated, it is hoped that there may be a successful effort to prevent its consummation. There is no doubt that enormous pressure, diplomatic, political and other, will be brought to bear upon the United States Government to further the scheme. For five or six years there has been a persistent work in this country by representatives of Italy, supplemented by the material interests of immigrant-carrying transatlantic steamship companies, to flood the South with "Italian" immigrants, under the pretext of helping the South to lighten its labor problem and to speed its development. More than one "Southern" convention has been floated by the aggregation of interests concerned about the South only as a means to their end. But there are Italians and Italians. Those of Northern Italy would make most desirable additions to the population of the South. Their qualities were especially emphasized by Mr. Hugh MacRae of Wilmington in his recent address on immigration to the South, made before the North Carolina Society of New York. Mr. MacRae spoke from experience with Italians in colonies which he has inaugurated in North Carolina, and he quoted Senator Tillman of South Carolina to the effect that, while the people of Southern Italy whom he had seen are not of the type the South would like to have, he felt sure that "if we could get any of the Northern Italians into the Southern States they would make good citizens." But Sicilians, and not Northern Italians, constitute the great bulk of Italian immigration to this country. It is only necessary to recall efforts of the Italian Government to promote their immigration to the United States for men of judgment to question the advisability of welcoming them here. This, of

course, applies only to the great mass of such immigrants and not to individual Sicilians, who are just as desirable as Northern Italians and who have come to this country because they were ambitious to avail themselves of its opportunities and not because their own Government desired to be relieved of them. Philanthropy in behalf of the Sicilian earthquake sufferers would take its best form in supporting the sufferers on their native soil. It would make a grave mistake in encouraging their migration in droves to this country.

### CEMENT MEN AND THE SOUTH.

Atlanta should get busy at once to capture the next annual convention of the National Association of Cement Users. At the fifth annual convention last week at Cleveland of that body rapidly increasing its importance the suggestion was made that Atlanta might be considered as a desirable meeting-place next year. The idea seemed to find favor with many of the men present, and it will undoubtedly receive attention when the executive board meets. There are strong reasons why Atlanta should work for the convention and why the convention should meet at Atlanta. The South is a part of the country which has still to realize its opportunities for the manufacture of cement and which has a climate that permits working in cement to go on practically all the year round. Atlanta is a convenient rallying point for architects, builders and others interested in cement to study in the exhibition, which is a great feature of the convention of the association of cement users, the constantly expanding diversification in the uses of cement, and that rallying would surely strengthen in the South the membership of the association. The Atlanta suggestion looks good from whatever standpoint it is viewed. Let Atlanta make it good.

### GIVING SOUTHERN BOYS A CHANCE.

Southern men who have profited personally in the material development of the South have a chance to benefit their fellows in a way involving no pauperizing of the beneficiaries and no burdening of themselves with problems about the proper disposition of fortunes too great for any healthy man to enjoy. For years the MANUFACTURERS' RECORD has been urging Southern men to found self-perpetuating scholarships in the agricultural and mechanical colleges of their section in order that poor but ambitious boys may have opportunity to gain the technical training that the South is demanding of its young men with greater and greater insistency. Our suggestion, based upon a plan actually in practice, we believe, at the Georgia School of Technology, is, briefly, for the founding of scholarships providing for the maintenance of boys during their college career, the boys pledging themselves to refund the loans thus created just as rapidly as they may after entering upon active business life. Our long-

standing plea is emphasized by the announcement that the trustees of the North Carolina College of Agriculture and Mechanic Arts at Raleigh have arranged that provision be made to pay about 40 boys for work done about the college to meet the expenses of their living while at college.

That is an enlargement of a practice which has prevailed at the North Carolina institution for some years, and is followed at a number of other points in the South. It is an excellent thing in its way, but it has its drawbacks. One may be sure that the boy who is willing to do work to pay his way through college will gain the right sort of education, and that the discipline of that kind of work will not be lost upon him in meeting the difficulties of manhood's work. It is hoped that the practice may become more general until no boy wishing a technical training shall be debarred from the opportunity to get it because he is too poor to spend three or four years at college.

Nevertheless, there is a better situation possible. Southern men of means can make it a fact without missing the comparatively few dollars required for it. They should make it unnecessary for the poor boy to lose the time from his regular studies that under the present system must be occupied in work for a living. They should establish wherever possible the loan-fund scholarships in the technical schools and back up their scholarships by personal interest in the holders of them, to the end that, having graduated, the latter may be given at home the opportunity to put into practice for the development of their section the training they have received. The South is calling to her young men who ought to have the best kind of technical training in the schools there. On another page of this issue of the MANUFACTURERS' RECORD, in his wonderful vision of the possibilities for the South in the full utilization of its chemical and mineral opportunities, Dr. David T. Day of the United States Geological Survey writes:

By the development of such a chemical industry and the development of such fertilizers we can not only prevent soils from becoming barren, but exhausted soils can be brought again into full fertility, and the practice of allowing the lands to lie fallow (which simply means giving to the soil the amount of time necessary for the plant juices to render soluble the necessary insoluble ingredients of plant life) can be entirely avoided, and any crop can be made successful any year. As usual, it is not only one feature of industrial activity which is needed, but it is the co-operation of agriculturists with intelligent promoters of chemical industries, first for the benefit of the agricultural products of the South, and then for the many manufacturing enterprises which will follow, and with the aid of sound engineering education for the students of our Southern colleges.

"With the aid of sound engineering education for the students of our Southern colleges," when will the Southern colleges be able to rise to the occasion? How better hasten the time than by giving Southern boys their chance in life, not by doles from sources upon which they have no claims, but by scholarship loans predicated upon ability and ambition and appealing to a boy's self-respect and self-reliance?

#### INTEREST IN ADVERTISERS.

The Kansas City Elevator Manufacturing Co., manufacturers of the Turner elevators, Kansas City, Mo., in a letter to the St. Louis agent of the MANUFACTURERS' RECORD under date of January 14, referring to a contract just closed in Baltimore for an elevator, adds:

We are free to say that we have never before received such attention and courteous

treatment from any publication in which we have advertised, for it has always appeared to us that the only interest any advertising paper had in us was in receiving our check for its space.

However, since becoming better acquainted with the MANUFACTURERS' RECORD we have learned to regard it in a different light from any other publication with which we have had dealings, and after reading the many splendid articles in your paper and witnessing the interest it shows in the welfare of its patrons, it seems quite natural that we should receive such splendid treatment from you, and while we shall be glad at any time to reciprocate as far as in our power to "boost" your paper, we are satisfied that any paper that pursues the business methods of the MANUFACTURERS' RECORD is bound to succeed.

#### THE READING THAT BOTH PROVES AND CREATES INTELLIGENCE.

Last week we published an editorial from the *Texas Bankers' Journal* in which the editor of that paper, commending the work of the MANUFACTURERS' RECORD, mentioned, among other things, that "every man who opens the MANUFACTURERS' RECORD will read it from cover to cover and take in every advertisement," and then he said "the editor's wife reads every word in it, including the advertisements, and then cries for more." It was not at all necessary that to this he should have added that she was a very intelligent woman. The very fact that she was the wife of the editor of the *Texas Bankers' Journal* would be accepted as proof of that without the other proof that she "reads every word of the MANUFACTURERS' RECORD, including the advertisements." No one, man or woman, except one of intelligence, would be interested in reading this paper and in studying its advertisements, and at the same time any one who regularly pursues the policy of reading the MANUFACTURERS' RECORD from beginning to end will necessarily become a person of very great intelligence.

More and more we find that business people, not content to give the MANUFACTURERS' RECORD a cursory examination at their offices, are taking it home for careful study, and a great many are having it directed to their homes for that purpose. For instance, Mr. H. J. Schwietert, chief clerk to the general immigration agent of the Illinois Central Railroad Co., writing from Manchester, Iowa, under date of January 9, says:

Your paper comes to our office regularly and I read it as regularly as it comes. In my judgment there is no other paper published containing as much information concerning the commercial world as the MANUFACTURERS' RECORD, and I want you to enter my name on your subscription list that I may have your magazine as a weekly visitor in my home, the same to begin with the first number of the new year, 1909.

Bearing on this question of reading advertisements, to which we have recently called attention, we are constantly in receipt of letters showing the value of our advertising pages to our readers throughout the country. Mr. J. B. Black, vice-president of the Caswell Cotton Mills, Kinston, N. C., in a recent letter, mentioned this point and said:

Your paper has been a great source of information to me while erecting the Caswell Cotton Mills. It has been an index to manufacturers of any part of the material that I used in the erection of our building, or the equipment thereof, and I deem it one of the greatest assistants to any manufacturer who wants to be posted as to prices of material and location of manufacturers.

In a letter from W. N. Camp, president of the Camp Phosphate Co. of Ocala, Fla., he writes:

I always refer to the advertisements for information concerning machinery, etc., used in our business.

The Southern Construction Co. of Pa-

ducah, Ky., in the course of a recent letter, said:

As a friend of mine remarked, your advertisements are full of powerful good reading.

They are, indeed, "full of powerful good reading." Our readers may at times disagree with the editorial views of the MANUFACTURERS' RECORD. We have no idea that we are going to be able to please everybody. As a matter of fact, the individual or the newspaper that pleases everybody must be of such wishy-washy character as to have no individuality, no force, no determination to hew to the line as one may see the truth, regardless of where the chips fall. The MANUFACTURERS' RECORD has its convictions and it expresses them. Some of its advertisers and some of its readers do not agree with the fight which for 25 years it has made in behalf of protection to the interests of the South as against the efforts of other sections to secure as their raw materials free of duty what are the finished products of the South. Many of our good New England friends and advertisers do not agree with us on that line of thought, since some of them are the very people who want to buy free coal and free lumber and free pig-iron. But having its own views, the MANUFACTURERS' RECORD proposes to express them. But, while some of our readers may not agree with what they find in our reading columns, they must agree with the "powerful good reading" which they find in our advertising pages. Moreover, in the advertising columns they have the widest possible diversity of thought expressive of the views of more than a thousand leading people as to the particular industry or the particular line of machinery or business which they think the most essentially important to themselves as well as to our readers. No one can study these advertising pages without a great enlightenment as to the vastness and variety of the business interests of this country, for here they will find more than a thousand of the foremost concerns in America telling of their product, of their enterprise, of their ability to do things.

And then there is another letter written by George W. Wrenn, secretary and treasurer of the Blue Ridge Construction Co., which is likewise well worth reading, for it points a moral. Mr. Wrenn says:

We should all make it a point in writing to advertisers to say we saw your ad. in the MANUFACTURERS' RECORD. I have been doing this, and have called others' attention to the help it would be to the paper and to the entire South by so doing.

#### WORKING FOR THE SOUTH.

No one can predict with any degree of assurance how long a piece of information about the South published in the MANUFACTURERS' RECORD will continue to do its work. For example, we have a letter from George B. Slocum, Deep River, Conn., in which he says that he wishes to read an article published in our issue of December 13, 1907, more than 13 months ago, and written by Mr. George Byrne, dealing with trucking opportunities in the district southward from Norfolk, Va., along the eastern coast of North Carolina. He writes that he ran across a circular reproducing extracts from the article. The article was merely one of thousands published from time to time by the MANUFACTURERS' RECORD, intended to attract attention to the many opportunities of the South. Quite frequently we are able to trace directly definite results from the reading of these articles in other parts of the country. The Connecticut man is an instance of interest in the South awakened in that way.

#### TEACHING ABOUT THE SOUTH.

Indicative of the deep interest in all things Southern in other parts of the country, and at the same time suggestive to Southern teachers, is a letter from Acting Director Calvin O. Althouse of the School of Commerce of the Central High School of Philadelphia, referring to his purchase of two copies of the pamphlet, "The South—Results—Resources," recently published by the MANUFACTURERS' RECORD. Mr. Althouse says:

I should like to have more copies for a general use for our student body, but unfortunately the appropriation for my department is overdrawn for the present year, and I must content myself with the personal purchases herein requested.

#### THE SOUTH'S DESTINY.

Congressman George T. Burgess of Texas, referring to the pamphlet "The South—Results—Resources," recently published by the MANUFACTURERS' RECORD, says:

"This splendid showing is most gratifying to all of us who are identified with the marvelous progress the South has made and is still making. The simple truth is that in the long run the evolution of commerce is in the main a question of physical geography, since the tendency of markets, which are the meeting places of supply and demand, is continually to shift to those points which are the nearest meeting places for the interchange of products.

"The development of the great export industries of wheat, cattle and cotton, as well as many other things, naturally tend toward ocean outlets south of New York, and it would seem to the impartial student that the Gulf of Mexico bids fair to ultimately become the Mediterranean of the Western Hemisphere.

"The completion of the Panama Canal will greatly strengthen the geographic position of the South with reference to trade relations. From every point of view the South has cause for great congratulation. The passing of sectional feelings, the growing interchange of domestic and foreign products, the increasing intermarriage of people from all sections. Indeed, the whole evolution of our country points unerringly to the ever-increasing commercial importance of the South.

"I congratulate you, my dear sir, upon the splendid work you are doing with your periodical in furtherance of these great possibilities."

#### Texans Want Conservatism.

[Special Cor. Manufacturers' Record.]

San Antonio, Texas, January 16.

Governor Campbell in his message to the Legislature of Texas recommends a two-cent railroad fare. This has already aroused a violent opposition among the business interests of Texas, especially in West and Southwest Texas, where many new lines of railroad are either building or projected. The Business Men's Club of San Antonio and a number of other similar organizations of business men are passing resolutions demanding calmness and moderation in laws affecting railroads and other corporations. The Texas Commercial Secretaries' Association has also taken up the fight, and indications are that Governor Campbell will not be paramount in the present Legislature as he was in the last one. In the viva voce resolution of thanks to the Texas Commercial Secretaries' Association passed by the Senate indications are that the legislators will do some thinking for themselves. There is no doubt that a determined effort will be made to check any radical legislation in Texas during the coming year, and indications are that such efforts will succeed, for the "trust-busting" propaganda has grown stale and commonplace in the ears of the people.



## ADVANCES IN THE USES OF CEMENT EXEMPLIFIED.

[Special Correspondence Manufacturers' Record.]

Cleveland, Ohio, January 16.

The fifth annual convention and exhibition of the National Association of Cement Users, which has been in session here for the entire week, will go on record not only as one which has marked the most notable advances made in the broader use of cement in a single year, but also as evidencing a rapidly increasing interest and appreciation on the part of the leading architects of the country than was ever before manifested. The keynote feature of both the convention proceedings and the exhibition was the artistic possibilities of cement. Nearly every one of the papers read was accompanied by stereopticon views of work done that was most impressive and convincing, and brought out strongly the purpose of the association to further the development of the use of cement along the broadest and best lines. The exhibition was also indicative of the movement to raise the standard of cement products, in that more than ever before at any previous one the managers endeavored to have the exhibitors make artistic concrete a feature in the exploitation of their products and machinery.

To encourage this, announcement was made earlier in the year that prizes would be given to those having the most attractive, effective and artistically arranged booths. That the exhibitors thoroughly realized the value and influence of this was evident from the manner in which they responded to the movement. In order that a fair and impartial judgment should be made the executive board selected as the committee to make the awards Dr. Charles S. Howe, president Case School of Applied Sciences; Mr. Charles H. Hopkinson, head of the local chapter of the American Institute of Architects, and Mr. Geo. B. McMillan, president Cleveland Builders' Exchange. The awards were as follows: First prize, Ideal Concrete Machinery Co., South Bend, Ind.; second prize, George H. Rackle & Son Co., Cleveland, Ohio; third prize, American Hydraulic Stone Co., Denver, Col.; fourth prize, Hayden Automatic Block Machine Co., Columbus, Ohio; honorable mention, Atlas Portland Cement Co., New York city; American Cement Co., Philadelphia, Pa.; Sandusky Portland Cement Co., Sandusky, Ohio; Ransome Concrete Machinery Co., Dunellen, N. J., and the Miracle Pressed Stone Co., Minneapolis, Minn.

All available space on the main floor of the big Central Armory, where the exhibition was held, was taken up, and, in addition, the gallery was also very nearly filled. Monday night was set apart by the officers of the association as complimentary to the citizens of Cleveland, and they were there by the thousands to view the exhibits. The intense interest which could be noticed among the groups surrounding the various booths to watch the demonstrations and ask questions was convincing to the observer that to them it must have been of more than passing interest. This, coupled with the fact that upon leaving they were usually loaded down with literature, showed a desire to further study the things which they had seen.

The exhibition was more than ever representative of the many varied parts of the cement industry, and ranged all the way from the manufacture of cement down to the tools used in applying it. All of the important improvements made in machinery and appliances from year to year are always brought out at the exhibitions of the association, as the manufacturers of them realize the splendid opportunity which is afforded them to get them before cement users from all parts

of the country in an effective and demonstrative way.

Altogether, there were about 100 different companies exhibiting. Nearly all of the large Portland cement manufacturers were represented by exhibits, and in the arrangement and design of their various booths they brought out very strikingly the wonderful artistic possibilities of cement. Art and architectural work of all kinds and for all purposes were shown. These exhibits were most attractive and convincing to the architects attending, as they impressed them with the fact that when properly handled this material will lend itself to the construction and adornment of the best class of structures. No branch of the industry is doing an exploitation work of the uses of cement as much as the cement manufacturers, and they are always working to raise the standard of work done with it, as well as discover new fields for its uses. In this work they spend thousands of dollars annually in compiling and publishing for free distribution matter of great importance to every user or contemplating user of cement. Through no other source could anyone interested obtain so much varied and valuable information as through these publications. Great quantities of this literature were presented to the visitors at the exhibition, and they will undoubtedly have the effect of bringing them to a fuller appreciation of the wonderful value and diversified uses of cement.

Then, too, the Portland cement manufacturers have their own association—the Association of Portland Cement Manufacturers—with offices in Philadelphia, Pa. Through this body, which is exceptionally well organized, a very broad and educative publicity work is conducted. In addition to supplying information of all kinds, it publishes a monthly paper—the *Concrete Review*—as well as numerous other papers for general distribution. At its booth here a stereopticon was kept in constant operation, showing work of every possible character which had been constructed in all parts of the country of cement in some form or another, and it was at all times a center of attraction to visitors.

The cement companies exhibiting were 13 in number and representing a combined capacity of output of about 40,000,000 barrels annually, which is a large percentage of the country's total annual production. Those exhibiting were the Alma Cement Co., Williston, Ohio; American Cement Co., Philadelphia, Pa.; Atlas Portland Cement Co., New York city; Berkshire White Portland Cement Co., New York city; Edison Portland Cement Co., New York city; Lawrence Cement Co., Philadelphia, Pa.; Lehigh Portland Cement Co., Allentown, Pa.; Pennsylvania Cement Co., New York city; Sandusky Portland Cement Co., Sandusky, Ohio; Superior Portland Cement Co., Charleston, W. Va.; Universal Portland Cement Co., Chicago, Ill., and Pittsburgh, Pa.; Vulcanite Portland Cement Co., New York city, and the Whitehall Portland Cement Co., Philadelphia, Pa.

No one of the allied cement industries have had so much influence on its general adoption for all classes of structural work, from buildings to the most important engineering undertakings of the day, as that of steel reinforcement for concrete. This development of the various systems of reinforced concrete has made possible the use of cement for construction work where otherwise it would not have been possible. A number of manufacturers of these materials were on hand with exhibits of their different systems. In their booths were shown the details and methods employed, as well as samples

and sections of their reinforcing metals, while several of them have small models showing the exact arrangement of the reinforcement when set in place. Each year many improvements are brought out and new companies enter the field. As this method of construction has been accepted by leading architects and engineers of the day as one which lends itself to the securing of ideal conditions in so many different structural works, the field is a very wide and constantly growing one. Those engaged in it are very progressive, but at the same time cautious, because they realize that if it is to gain confidence the work must be done right. To insure this they all have competent designing engineers, who are well posted on reinforced concrete, to advise those contemplating the erection of such work, both as to the proper amount of metal that it is necessary to use, as well as the design of a structure that will embody the best features with the lowest possible cost. It has undoubtedly been this broad work that has aided so much the rapid advances that have been made by reinforced concrete in securing favor. In addition to giving information of this character to visitors, as well as pamphlets containing valuable data relating to concrete, the representatives of the different companies exhibiting did splendid work by enlightening inquirers as to the real merits of reinforced concrete construction. Among the exhibits of this character were the American Steel & Wire Co., Chicago, Ill.; Brown Hoisting Machinery Co., Cleveland, Ohio; Corrugated Bar Co., St. Louis, Mo.; General Fireproofing Co., Youngstown, Ohio; National Wire Cloth Co., Sandusky, Ohio; Northwestern Expanded Metal Co., Chicago, Ill., and the Oneida Community, Oneida, N. Y.

Great interest is always manifested by visitors to these annual affairs in concrete block and brick machinery, and those in charge were kept busy at all times making demonstrations of their machines and telling of their various qualities and the principles of the blocks made by them. Nearly every exhibitor of this class of machinery has his equipment in active running order, so that the visitor could see clearly for himself exactly how the machine was operated and the character of block or brick turned out. One of the most notable features of the exhibition was the manner in which these machines are being improved year by year. Each year finds those not of practical value eliminated and new and advantageous improvements or changes made to the old reliable ones. The exhibition of concrete block and brick machinery was especially gratifying to those who have the best interests of the industry at heart, and it was manifested in many ways that determined efforts are being made to produce those products that shall not only stand for themselves, without being an imitation of something else, but shall also be of such a character as to commend themselves to architects for use in higher classes of construction than they have been in the past. This industry is now being so perfected that most any part of the building can be built of them, including all of the ornamental work. The concrete block and brick machinery manufacturers having booths this year were: Anchor Stone Machinery Co., Rock Rapids, Iowa; American Hydraulic Stone Co., Denver, Col.; Ashland Steel Range & Manufacturing Co., Ashland, Ohio; Besser Manufacturing Co., Alpena, Mich.; Buckeye Concrete Co., Creston, Ohio; Cement Machinery Co., Jackson, Mich.; Century Cement Machine Co., Rochester, N. Y.; Coltrin-Boos Manufacturing Co., Jackson, Mich.; Concrete Stone & Sand Co., Youngstown, Ohio; DeArmon-McKenny Manufacturing Co., Pequa, Ohio; J. B. Foote Foundry Co., Fredricktown, Ohio; Hayden Automatic Block Machine Co., Columbus, Ohio; Ideal Concrete Machinery Co., South Bend, Ind.; LaGrange Specialty Co., LaGrange, Ind.; Miles Manufacturing Co., Jackson, Mich.; Miracle Pressed Stone Co., Minneapolis, Minn.; Multiplex Concrete Machinery Co., Elmore, Ohio; Peerless Brick Machine Co., Minneapolis, Minn.; Runyan Concrete Machinery Co., Canal Dover, Ohio; Rutherford Cement Construction Co., Rutherford, N. Y.; Sanford Concrete Machinery Co., Toledo, Ohio; Singer Block Machine Co., Jackson, Mich.; Somers Bros., Urbana, Ill.; United Cement Machinery Manufacturing Co., Plain City, Ohio, and Wettlaufer Bros., Buffalo, N. Y.

One of the secrets of good concrete and stable concrete buildings and other structures lies in the mixing. Improperly or not thoroughly mixed, poor results are bound to follow and great injury done to the cement industry. For many years this was done entirely by hand, it being thought that it could not be done otherwise in the right manner. Visitors to this exhibition would be convinced from the great array of mixers shown that this idea has been changed and machine mixing is today accepted as the very best way in which it can be done. All sizes and kinds of mixers were shown, ranging in size from the small hand mixer to the large ones driven by engines or motors. Practically all of those on exhibition were in constant operation, and it was, indeed, a most interesting sight to watch them and to observe the many different mechanical features and designs. As the mixing of concrete is the keynote to success to cement users, they naturally devoted much time to watching and studying the merits of each, and large numbers of them could always be found surrounding a mixer in course of demonstration. Mixers shown included those made by the Ashland Steel Range & Manufacturing Co., Ashland, Ohio; Ballou Manufacturing Co., Belding, Mich.; Besser Manufacturing Co., Alpena, Mich.; Cement Machinery Co., Jackson, Mich.; Cement Tile Machinery Co., Waterloo, Iowa; Century Cement Machine Co., Rochester, N. Y.; Chain Belt Co., Milwaukee, Wis.; Chicago Concrete Machinery Co., Chicago, Ill.; Clover Leaf Machine Co., South Bend, Ind.; Eureka Machine Co., Lansing, Mich.; F. G. Gaunt Manufacturing Co., Fort Wayne, Ind.; Hall-Holmes Co., Jackson, Mich.; Hayden Automatic Block Machine Co., Columbus, Ohio; Ideal Concrete Machinery Co., South Bend, Ind.; Illinois Gravel Co., Princeton, Ill.; Kent Machine Co., Kent, Ohio; Knickerbocker Company, Jackson, Mich.; Koehring Machine Co., Milwaukee, Wis.; Miles Manufacturing Co., Jackson, Mich.; Miracle Pressed Stone Co., Minneapolis, Minn.; Multiplex Concrete Machinery Co., Elmore, Ohio; Municipal Engineering & Contracting Co., Chicago, Ill.; Ohio Ceramic Engineering Co., Cleveland, Ohio; Raber & Lang Manufacturing Co., Kendallville, Ind.; Ransome Concrete Machinery Co., Dunellen, N. J.; Runyan Concrete Machinery Co., Canal Dover, Ohio; T. L. Smith Company, Chicago, Ill.; Svenson-Shuman Machine Co., Pittsburgh, Pa., and United Cement Machinery Manufacturing Co., Plain City, Ohio.

Concrete drain tiles seem to be growing in favor among users if the machinery to make them exhibited this year is a criterion. These machines are all automatic in operation, taking the aggregate from the mixer and delivering the finished tile at the other end. From the simple manner in which these machines operate and the splendid products turned out in great quantities in a short time and at a small cost, they should prove a source of profit to manufacturers of cement products in

many sections of the country. Among those in this class were the Besser Manufacturing Co., Alpena, Mich.; Cement Tile Machinery Co., Waterloo, Iowa, and the Miracle Pressed Stone Co., Minneapolis, Minn.

Improvements were also noted in the machinery for making cement roofing tile. The use of cement for this purpose may not have grown so rapidly as in its other phases, but indications point to a continually increasing demand, according to those in this line, who say they are now making good in all of their claims for these products. Roofing-tile machinery was shown by the American Cement Roofing Co., Columbus, Ohio; Diamond Cement Roofing Machine Co., Toledo, Ohio, and the Indiana Cement Form Co., Indianapolis, Ind.

An interesting and growing allied cement industry was shown by the many exhibits of forms or molds for all kinds of cement products and concrete work, including those for sewer pipe and ornamental work of every kind, steel centering for large sewers and universal forms for wall construction. In fact, the tendency seems to be toward securing wherever possible a form usually of sheet steel that can be used repeatedly, thus in the long run not only greatly reducing the cost of placing concrete, but also giving a much better and truer job. The exhibits of this kind this year show a marked advance and improvement over previous ones. Among the firms showing some kind of form or steel centering were Louis Auer & Son, Milwaukee, Wis.; Besser Manufacturing Co., Alpena, Mich.; Blaw Collapsible Steel Centering Co., Pittsburgh, Pa.; Ideal Concrete Machinery Co., South Bend, Ind.; Illinois Gravel Co., Princeton, Ill.; Miracle Pressed Stone Co., Minneapolis, Minn.; Raber & Lang Manufacturing Co., Kendallville, Ind.; Runyan Concrete Machinery Co., Canal Dover, Ohio, and Simpson Cement Mold Co., Columbus, Ohio.

Composition roofing materials were shown by the Stowell Manufacturing Co., Jersey City, N. J.; the National Roofing Co., Tonawanda, N. Y., and the Barrett Manufacturing Co., New York city. The latter company also exhibited its waterproofing materials for concrete work; also in this line being exhibits from the Billings-Chapin Co., Cleveland, Ohio, and the Knickerbocker Chemical Co., New York city, which makes chemical preparations for rendering the surfaces of concrete waterproof.

A number of interesting specialties and accessories for cement users were also shown, these including Chase City Foundry & Manufacturing Co., Columbus, Ohio, track system and cars for concrete product plants; National Vault Co., Cleveland, net plants; National Vault Co., Cleveland, Ohio, concrete burial vault; Insley Manufacturing Co., Indianapolis, Ind., large steel buckets for handling concrete; Marblecrete Products Co., Akron, N. Y., imitation marble slabs for all purposes in building construction; Garden City Sand Co., Chicago, Ill., "Stone-kote," a plastic Portland cement product used for the exterior facing of surfaces of any kind in building work, giving a most beautiful finish and in many varied colors; also used for facing cement blocks; S. H. Wightman, Cleveland, Ohio, a new reinforced brick-faced concrete block, which gives an exterior appearance of brick wall construction and the laying of one block equaling that of 60 brick, real brick being used on the exterior; F. M. Jackson Co., Akron, N. Y., new system of building construction, consisting of applying cement mortar to expanded metal on both inside and outside walls, using neither weatherboarding, stone nor brick; Dietrichs Clamp Co., Little Ferry, N. J., wall form clamps, making possible a two-

form board method of wall construction and which allows the boards to be removed while the concrete is still damp; George Rackle & Sons Co., Cleveland, Ohio, church window and other ornamental work of "Art Stone," showing the wonderful artistic possibilities of cement; Wadsworth, Howland & Co., Boston, Mass., a brick-and-cement coating for exterior finishes; Zeiser Bros., Berwick, Pa., tie and dividing plates for sidewalk construction, and Akron Gravel & Sand Co., Akron, Ohio, washed and screened gravel and sand.

Everyone attending the convention, which was held in the assembly-room of the Hotel Hollenden, was impressed with the deep interest shown by the delegates in every subject under discussion. These sessions might almost be termed experience meetings, because when any paper was read those in the hall did not hesitate to ask questions and give their own experiences concerning the matter under discussion, so that every subject was most thoroughly thrashed out and much benefit derived. This method is always followed, in order that all members may learn of the successes or failures of others, and thus profit by them to the betterment of the industry at large and to enhance its growth along the best lines. It was originally intended to devote the morning and evening sessions to the reading of papers and the discussions of specifications, etc., thus leaving the afternoons open for the members to attend the exhibition, but the discussions were so long and the desire for information so great that there was practically no interruptions to the meetings from 9 o'clock in the morning until 11 o'clock at night except for meals. A noteworthy fact, too, was that the hall was always well crowded, indicating the great thirst after knowledge about cement and its uses. This deep interest has been the source of great satisfaction to those in the association who are striving to place the use of cement on the very highest of standards.

After the formal addresses and responses of welcome on Tuesday morning the convention immediately settled down to business as provided by a rather elaborate program, embracing papers of the greatest importance by men who stand as authorities today in their several lines of work. Some idea of the scope of these subjects may be had from the following list of papers that were read, and by whom:

Address by Dr. Charles S. Howe, president Case School of Applied Science; "Cost and Value of Concrete Roads," by J. H. Chubb, Chicago, Ill.; "Cost of Reinforced Concrete Construction as Applied to Buildings," by Leonard C. Watson, president Abertaw Construction Co., Boston, Mass.; "The Availability of Concrete for Bridges—Its Cost and Durability," by H. H. Quimby, engineer of bridges, Philadelphia, Pa.; "Cost of Reinforced Concrete Construction as Applied to Bridges," by E. P. Goodrich, consulting engineer, New York, N. Y.; "Comparative Cost of Reinforced Concrete Buildings," by Emile G. Perrot, architect, Philadelphia, Pa.; "Advantages of Reinforced Concrete for Railroad Construction," by B. H. Davis, assistant engineer D. L. & W. R. R., Hoboken, N. J.; "The Applicability and Comparative Cost of Concrete and Reinforced Concrete for Subway Construction," by Charles M. Mills, principal assistant engineer Philadelphia Rapid Transit Co., Philadelphia, Pa.; "Value and Cost of Reinforced Concrete for Retaining Walls," by A. Lindau, engineer Corrugated Bar Co., St. Louis, Mo.; "Necessity and Cost of Cement Inspection," by W. Purves Taylor, engineer in charge testing laboratory, City Hall,

Philadelphia, Pa.; "Fireproofing With Concrete—Its Suitability and Comparative Cost," by Ross F. Tucker, president Concrete Association of America, New York, N. Y.; "Methods of Attaching Shafting and Machinery in Reinforced Concrete Buildings," by William M. Bailey, chief engineer Eastern Concrete Construction Co., Boston, Mass.; "Progress in Use of Metal Forms, With Comparative Costs," by W. L. Caldwell, general manager Berger Manufacturing Co., Canton, Ohio; "Value and Cost of Steel Centers for the Construction of Culverts and Bridges," by C. F. Scott, president Illinois Gravel Co., Princeton, Ill.; "Concrete Piles—Forms, Advantages and Cost as Compared With Wooden Piles," by C. W. Gaylord, Chicago, Ill.; "Value and Cost of Steam Curing of Concrete Blocks," by F. S. Phipps, manager Central Stone Co., St. Joseph, Mo.; "The Present and Future of the Cement Block—Its Cost, Manufacture and Availability," by J. Augustine Smith, Ideal Concrete Machinery Co., South Bend, Ind.; "Waterproofing, Various Applications and Comparative Costs," by T. Hugh Bookman, civic engineer, New York, N. Y.; "Cold-Storage Warehouses of Reinforced Concrete Construction," by J. P. H. Perry, Turner Construction Co., New York, N. Y.

The annual address of President Humphrey of the association was of great interest to the members, as it outlined much of what has been accomplished by the association and what is hoped can be done. He said in part:

"In the year which has elapsed since I last addressed you on subjects of vital importance, to our association we find ourselves stronger and far better organized for the work of education on which we are engaged than at any other time in our history. This has been a year of decided development and much progress. Our membership has grown steadily, and the attendance at our annual conventions shows each year an increasing appreciation of the value of membership in this association. The members are now beginning for the first time to more thoroughly realize how helpful and how invaluable has been the information which they have acquired at each annual convention, and are now willing to openly express their thorough appreciation of the great good. There can be no doubt that the example which they set to their fellow-competitors who are not members of the association does much to raise the standard of honest workmanship and first-class construction. After many years of work the joint committee on concrete and reinforced concrete has at last agreed upon a preliminary report on rules for the use of these materials, and this report will be presented at the annual meeting of the American Society of Civil Engineers next week, the annual meeting of the American Railway Engineering and Maintenance of Way Association in March and the American Society for Testing Materials in June of this year."

Mr. Humphrey spoke of the tremendous losses that annually occur from fire in this country, and made an earnest plea for the enactment of laws to prevent the erection of other than fireproof public meeting-places. He referred to the Collinwood school fire in Cleveland and Boyertown theater fire, when so many women and children lost their lives, and said that instead of profiting by these awful experiences, as would naturally be supposed, the country, after the horror of such a disaster has ceased to attract attention, lapses into an indifference from which it can only be moved by another similar disaster. In pointing out the necessity of a revision of the building laws of the country, he said that progress has been extremely slow, for

the reason that certain inertia must be overcome in removing the prejudice against changing existing laws, and that the influence of various interests opposed to the revision for commercial reasons has been another factor in preventing the adoption of better laws. Adequate laws are the first essential in bringing about conditions to prevent the big annual fire losses. Laws must be enacted that will not only regulate new construction, but that will invest in the building authorities the right to condemn structures whose very existence are a menace to public safety.

Another leading feature in the papers read was that dealing largely with the cost of concrete construction. Along this line was a paper on "Comparative Cost of Reinforced Concrete Buildings," by Emile G. Perrot, architect, Philadelphia, Pa. Mr. Perrot told of the development of concrete for building purposes from its first use for foundations up to its present use through reinforcing metal for the entire structure. He pointed out the necessity for owners in these days to consider the economical aspect of construction, and aside from the desire to conserve their property, that is, to build so as not to burn, a great saving in insurance premiums can be made by a selection of the proper type of construction. Twenty-five years ago fireproof buildings for factory purposes were uncommon, but as this country's manufacturing interests advanced better buildings became the demand, and architects and engineers were employed to design them. This, together with the insistence of the insurance companies for a higher standard of building, has led up to the time when reinforced concrete structures are to be the rule rather than the exception.

Referring to costs, he said: "As to increased cost of reinforced concrete over slow-burning mill construction, everything else being equal, it varies from 10 to 30 per cent., according to the heaviness of the construction and the size of the building, also the number of times the forms can be reused. In addition to the saving on insurance by having a fireproof reinforced concrete building, there must be taken into consideration the effect of wear and tear on the building, if of the ordinary type, this being especially true where vibrating machinery is used. In comparing the cost of reinforced concrete with steel construction fireproofed, we find that concrete construction is cheaper than the steel construction fireproofed. Actual bids on the two types of construction for the same buildings reveal some interesting facts." Mr. Perrot then referred to the Ketterlinus building in Philadelphia, which is eight stories in height, and said the reinforced concrete was about 20 per cent. cheaper, and to the Boyertown building in the same city, this structure being 10 stories in height, and the owners saved \$60,000 by the use of reinforced concrete rather than steel. In conclusion, he said: "To sum up, the cost of reinforced concrete buildings can best be considered by classifying them under several headings:

"1st. Warehouses and manufactories; cost, 8 to 11 cents per cubic foot.

"2d. Stores and loft buildings; cost, 11 to 17 cents per cubic foot.

"3d. Miscellaneous, such as schools and hospitals; cost, 15 to 20 cents per cubic foot.

"These costs include the building complete, omitting power, heat, light, elevators and decorations or furnishings. The above prices are taken from the cost of buildings actually erected."

Perhaps the most interesting session of the whole convention was on Wednesday evening, when nearly all of the papers were devoted to the artistic possibilities of cement in all classes of construction and ornamental work. The program for the



evening provided for the report of the committee on art and architecture. This was read by Albert Moyer of the Vulcanite Portland Cement Co., who has devoted a lot of study to this kind of work. The report dwelt upon the various influences that molded the architecture of different periods and led up to that of the present day. During the past year the committee had gathered from architects in all parts of the country photographs and drawings of work which they had executed in concrete, and selections were made from these and prizes awarded for the best work. A number of these were shown by stereopticon slides, and they strongly indicated the high-class work that architects in various parts of the country are doing with the use of cement. Other addresses on the same evening included "Decorative Concrete Stone," by F. A. Norris of Emerson & Norris, Boston, Mass., and showing some of the very finest kind of decorative work made from cast stone; "Unburnable Homes and Their Architectural Possibilities," by B. A. Howes, engineer, New York city, indicating some striking architectural possibilities; "Small Concrete Houses—Manufacture and Cost," by C. R. Knapp, Philadelphia, Pa.; "Monolithic Concrete Wall Buildings—Methods, Construction and Cost," by Col. Robert H. Aiken, Chicago, Ill., and "Evolution in Reinforced Concrete Construction," by Harry Franklin Porter, Philadelphia, Pa. The effect which this kind of work is having upon the leading architects of the country was voiced in the sentiments of Mr. Charles H. Hopkinson, head of the Cleveland Chapter of the American Institute of Architects, who after this session said that although trained along the lines of old school architecture, he felt from what he had seen that evening that he was being brought to appreciate the artistic value of concrete. There must be more freedom in handling cement, he added, and architects must withhold judgment and measure by the best standards. He said that he was convinced that cement can give as fine a design as any other material, and that he was much impressed with the manner in which the association was pushing the industry.

The association has a number of sectional committees, whose purposes are to work out standard rules and specifications governing the various phases of the industry. These committees have done a magnificent work, and when their reports were submitted to the convention for consideration they were immediately followed by a general discussion, all looking to the incorporation in the adopted specification the results of the best practices of the day, so that the members in following them may feel that they are operating under the very best known conditions. This work continues from year to year, the specifications being changed at each convention if it is felt that the suggested changes are of sufficient importance to warrant. These changes must necessarily be made for a few years at least, until a longer and fuller trial has been given them, so that when the time has been reached when no changes are necessary the members can feel that they have secured the goal of their ambition.

A most interesting report of the work of the publicity committee was made by Chairman P. Austin Tones of the Atlas Portland Cement Co., who pointed out that the duties of the committee were to prepare suitable matter for the daily newspapers, with a view to encouraging public interest in the various uses of cement. He asked for the co-operation of all members in this work, as it was of the utmost importance to get the public to understand the true character of cement, but that under no circumstances was the committee

for the purpose of entering into any discussions or carrying on any controversy with those opposing the advance of cement uses.

The following officers were elected for the ensuing year: President, Richard L. Humphrey, Philadelphia, Pa.; first vice-president, Merrill Watson, East Orange, N. J.; second vice-president, M. S. Daniels, Suffern, N. Y.; third vice-president, E. S. Larned, Boston, Mass.; fourth vice-president, George C. Walters, Atlanta, Ga.; secretary, George C. Wright, Rochester, N. Y.; treasurer, H. C. Turner, New York city; vice-presidents and chairmen of standing sectional committees—art and architecture, Leonard C. Wason, Boston, Mass.; building laws and insurance, W. H. Ham, New York city; roadways, sidewalks and floors, C. W. Boynton, Chicago, Ill.; exterior treatment for concrete surfaces, Sanford E. Thompson, Newton Highlands, Mass.; machinery and appliances, L. V. Thayer, Minneapolis, Minn.; concrete and reinforced concrete, A. Lindau, St. Louis, Mo., and specifications for fireproofing, Rudolph P. Miller.

Several cities presented invitations for the convention next year, but these were, as usual, referred to the executive board for consideration. There seems, however, to be a determination to meet in the East or South next year, as neither of those sections has ever yet been selected, and it being felt that such selection would do much toward stimulating interest in cement work. Both Atlantic City and Atlanta, Ga., were favorably spoken of, with leanings toward the South, as this section of the country affords the broadest opportunities for development of cement uses by reason of its climate being suitable for outdoor work at all times of the year. There is no question but that a convention and exhibition of this character in Atlanta would attract many Southern cement users, and not only make its many uses more favorably known, but it would also center a great amount of interest in the association itself and add much to its membership.

WM. H. STONE.

#### Louisiana Agriculture.

In the summary of the annual report of the Louisiana State Board of Agriculture and Immigration the agricultural output of the State for the past year is summarized thus: 553,841,800 pounds of sugar, 208,569,400 pounds of rice, 20,308,717 bushels of corn, 3,010,615 bushels of sweet potatoes, 729,345 bushels of Irish potatoes, 540,581 barrels of molasses, 520,000 bales of cotton, 106,440 boxes of oranges and 36,520 barrels of syrup, together with great quantities of vegetables, small fruits, nuts, tobacco, alfalfa and other hays.

#### Lumber Dealers Meet.

The Retail Lumber Dealers' Association of Alabama, Georgia and Tennessee held its fifth annual convention at Birmingham last week. An important subject discussed was the competition of manufacturers and jobbers in selling to customers direct, the association protesting against the custom. Before adjournment it was decided to hold the next convention at Atlanta in July. The following officers were elected for the ensuing year: W. M. French of Knoxville, president; B. Crawford of New Decatur, vice-president; W. E. Wailes of Atlanta, secretary.

The new fertilizer plant erected at Statesboro, Ga., by the Bulloch Oil Mills is practically completed, and will be put in operation at once.

If you wish to keep posted on the progress of the South, read the MANUFACTURERS' RECORD. Price \$4 a year, or six months for \$2.

#### SALES OF 46,000 TONS

By Three Interests in the Birmingham Iron Market.

[Special Cor. Manufacturers' Record.]

Birmingham, Ala., Dec. 18, 1908.

These letters have of late characterized the iron market as very quiet, but very firm. That was the verdict generally of the trade here. The transactions spread over the market were as thin veneering. Some days they were very thin. But just when it looked as if the tendency was to a greater quietude the pipe interests would come in for a good round lot and give desired strength to the weak-kneed. Following the example of the Alabama Consolidated Company, the Sloss-Sheffield Company let go 20,000 tons on the basis of current values, say \$13 for No. 2 foundry; delivery during the first half of the current year. Another of the leading interest placed two lots of 3000 tons each on the basis of \$13 for No. 2 foundry. Although the market is reported very quiet, here are three sales made by the leading interests that aggregate 46,000 tons. Though reported as a very quiet market, one of the leading interests has booked orders that aggregate more in amount than its make so far this month.

There were a few sales reported during the week of moderate amounts, say, from car lots up to 300 tons, but the sum total was of no moment. There was one sale of a round lot made on the basis of \$12.75 for No. 2 foundry, but it was resale iron, and as the transaction was negotiated in another city, particulars are not available with certainty. It is gossip that the sale was for delivery during the current quarter. The buyers who made these purchases represented pipe interests. While the sellers knew that they had not filled their requirements, and would sooner or later have to enter the market, they did not expect them to fill their wants for some time yet. Outside the sale reported above at cut price, the market has been held very firm on the basis of \$13 for No. 2 foundry. The only feature in it of any special interest is the scarcity of low grades. They are hard to locate, and when found they are at once grabbed up. Some of the interests report a holding up of shipments on contracts.

Scrap iron continues in the same rut that has characterized it for some time past. Quotations are reported as unchanged, and the demand as of no moment. As reported, quotations are as follows:

Old iron axles, \$17.50.  
Old steel axles, \$16.25.  
Old iron axles, \$16.50.  
Car wheels, \$14.  
No. 1 railroad wrought, \$14.50.  
No. 2 railroad wrought, \$12.75.  
No. 1 country wrought, \$11.50.  
No. 2 country wrought, \$10.50.  
No. 1 malleable, \$11.50.  
No. 1 machinery, \$11.50.  
Wrought-iron pipes and flues, \$11.50.  
No. 1 steel, \$11.  
Stove plate, \$10.  
Cast borings, \$7.

The activity in building circles seems to have commenced in earnest. It is now stated by authority that financial arrangements have been made for the erection of a handsome apartment-house on a lot of 100x140 feet, and situated on the leading avenue in the residence district. It will be constructed of reinforced concrete blocks, and the decorative material to be used in the construction will be manufactured in the district. The plans are in the hands of the architect, and it is understood that the building is to be eight stories high, and that the cost will be in the neighborhood of \$125,000. The leading spirit of the enterprise is E. C. Bowman, a large contractor here, and one of the foremost

builders in the South. Work on the building will commence within 30 days.

Plans for the new grain elevator, meal and grist mill which the Wood & Crabbe Company will erect on the corner of Avenue A and 14th street are completed. They call for a three-story millhouse, a modern grain elevator and a power-room for the electrical machines that will be installed. The millhouse will be completed first. The storage warehouse will be 100x240 feet, and will be modern in every respect, and will be on the order of a monster cold-storage plant. The total cost of the plant will exceed \$200,000. The total cost of the entire enterprise will materially exceed \$300,000. Work on it will commence at the earliest possible date.

The basis of the plan for financing the 12-story steel construction fireproof hotel on the corner of Fifth avenue and 20th street has been made public, and is as follows: To finance the hotel construction by issuing securities of 6 per cent. first mortgage bonds, running 20 years, for \$300,000, and 6 per cent. 10-year second mortgage bonds for \$100,000. In addition to these issues there will be 6 per cent. cumulative preferred stock issued to the amount of \$400,000, making the total issues \$800,000. J. M. K.

#### Chattanooga Building.

[Special Cor. Manufacturers' Record.]

Chattanooga, Tenn., January 16.

The First Presbyterian Church, of which Rev. J. W. Bachman is pastor, will commence receiving proposals in a few days for the erection of the superstructure of the new church at the corner of McCallie avenue and Douglas street. The total cost will be \$100,000. A contract was awarded to Contractor T. S. Moudy, James Building, in October last at \$9414 for the granite foundations and concrete floor for the auditorium. The building above the foundations will be of cream-colored brick, with tile roof and terra-cotta trimmings. The dome will be covered with copper. Marble columns will be used in the portico. The floor of the vestibule and entrance to the Sunday-school will be paved with tile. The interior finish will be of quarter-sawn oak. Steel trusses will support the roof in the auditorium and Sunday-school, and steel columns will be used in the Sunday-school. With a steam-heating plant, plumbing and gas and electric lighting, this will be one of our finest modern churches. Charles E. Beardon, Chamberlain Building, is the architect, while McKim, Mead & White, 160 Fifth avenue, New York, are the associate architects. H. S. Probasco, president of the American National Bank, is chairman of the building committee.

Rev. T. H. McCallie has awarded contract to George Lerch, R. F. D. No. 1, Highland Park Station, for the erection of a \$6000 two-story-and-basement, brick, composition or slate-roofed apartment-house at 1121 East 8th street. There will be four apartments of five rooms each. Concrete will be used for footings, walks and sidewalks. The building will have hard pine interior finish, cabinet mantels, electric and gas lighting, hot and cold water, and modern plumbing. There will be four hot-air heating plants, a separate one for each apartment. Plans were prepared by H. D. Breeding, Birmingham, Ala. Rev. T. & McCallie, East Lake, Tenn., has the building in charge.

R. Toombs Wright, Temple Court, will erect three one-story frame, shingle-roof dwellings at the corner of Duncan avenue and Lyster street to cost \$4500. They will have hard pine interior finish, cabinet mantels, modern plumbing and gas and electric lights.

M. C. Hasselle, care of Converse Bridge Co., is having plans prepared by

Architects Huntington & Sears, News Building, for a \$4000 two-story brick, slate-roof private residence on Union avenue. The interior finish will be of quartered oak and hard pine. A hot-water heating plant, cabinet mantels and gas and electric lights will make this a comfortable modern home.

The Central Baptist Church, of which C. S. Wilkins is chairman of the building committee, at 1327 Market street, has awarded the contract for gray vitrified brick to Contractor James Suffern, 12 East Terrace street. Proposals for the stone work, steel trusses, galvanized-iron work and lumber and mill work are now being considered. Architect R. H. Hunt, James Building, drew the plans for this church edifice, the superstructure of which

story brick, slate-roof apartment-house, having four apartments of five rooms each. There will be hard pine interior finish, brick mantels, modern plumbing and gas and electric lighting.

E. Waterhouse of Smartt Bros. & Co. will have his new \$4000 private residence on Mission Ridge erected under his own supervision. It will be a two-story brick and stucco building, with shingle roof, having eight rooms and bathroom. It will also have hard pine interior finish, cabinet mantels, modern plumbing and a hot-air furnace for heating. It will be wired for electricity and piped for gas. Plans are by Architect Daniel A. Reamer, First National Bank Building.

Prof. D. A. Graves, 818 East 10th street, is receiving proposals through

## DISTINCTIVE IN TEXAS PETROLEUM HISTORY.

[Special Correspondence Manufacturers' Record.]

Houston, Texas, January 15.

Contemplating the Southwestern oil industry there is nothing so distinctive in it or that so aptly characterizes its growth as the history of The Texas Company, with general offices at Houston. It is a transporter, refiner and distributor of petroleum and its products throughout the markets of the world, and its growth is one of the most remarkable business developments in the industrial history of this country. The company is seven years old. But in that period its capital stock has risen from \$50,000, the capital of the parent company, to \$18,000,000, and its business has

grown from a small distributor of oil to a company that has built or acquired an extensive fleet of oil-carrying vessels to take care of coastwise and export trade.

The company is the outgrowth of the Texas Fuel Co. This parent concern was organized by citizens of Corsicana in 1901 with a capital stock of \$50,000, and was incidental to the Beaumont oil boom, formed for the purpose of marketing fuel oil. It built earthen storage to take care of the overwhelming oil production at that time, and when the output began to decline and prices ascended, it realized on the investment. But the fuel-oil market did not develop commensurate with stocks and



MAP INDICATING THE OPERATIONS OF THE TEXAS COMPANY.

is to cost \$25,000. Contractor Joseph Trimby, News Building, is foreman for the owners.

E. P. Knowles, 219 East 9th street, is erecting an \$1800 two-story brick, composition-roof mercantile building on Dodds avenue, in Ridgedale (a suburb).

H. H. Embrey, with Trigg, Dobbs & Co., has awarded a contract to Contractor James M. Potts at about \$4000 for the erection of two two-story brick, tin-roof dwellings at 1019 and 1021 East 9th street. They will have hard pine interior finish, gas and electric lights, cabinet mantels and modern plumbing.

N. H. Grady of Glover & Grady is having plans prepared by Architect W. T. Downing, James Building, for the remodeling of dwellings at 304 and 306 West 7th street. They will be changed into a two-

Architects Adams & Alsup, James Building, for the erection of a \$3000 two-story-and-basement, brick, slate-roof private residence at above address. There will be a hot-water heating plant, gas and electric lighting, and hard pine interior finish.

T. B. COLBURN.

The Board of Trade of St. Augustine, Fla., has elected Messrs. G. S. Meserve, president; F. J. Howatt and Harry L. Brown, vice-presidents; H. Canfield, secretary and treasurer, and A. W. Corbett, E. H. Reynolds, H. W. Davis, L. L. Simms and G. B. Lamar, board of directors.

The Board of Trade of Greenville, S. C., Messrs. F. F. Capers, president, and John Wood, secretary, is circulating a folder giving succinctly "Twenty-seven Business Facts About Greenville."

expanded from that of a small distributor of fuel oil to a point in tonnage regarded as second only to the Standard Oil Co.

The Texas Company has in the period mentioned built distributing stations in all the principal cities and towns of Texas and Louisiana, established large refineries at Port Arthur and Dallas, acquired through purchase and by additions and alterations; put into operation probably the largest asphalt manufacturing plant in the world at Port Neches; established ocean and export terminals at Port Arthur, New Orleans, New York, Philadelphia, Baltimore, Providence, and in Europe; constructed extensive pipe-line systems and purchased tank cars and other equipment to handle business and make available for its refineries the oil production of the Texas, Louisiana and Okla-

supplies of oil, and it was found necessary to create new or additional avenues of disposition.

The Texas Company at this juncture was formed with a capital stock of \$3,000,000, the proceeds of the sale of the stock being devoted to the construction of a refinery at Port Arthur, Texas, and the establishment of other facilities, such as pipe lines, etc., to bring the raw material to the new works, marking the beginning of expansion into the refining branch of the Gulf Coast oil industry in 1902. Ocean terminals were built at Port Arthur and on the Atlantic Coast and the nucleus of a fleet of oil-carrying vessels formed.

New oil fields were developed and the market for refined and lubricating oils began to expand, and to meet these condi-



tions by providing additional marketing and other facilities, as well as new investments, it was found necessary in 1904 to increase the capital from \$3,000,000 to \$6,000,000.

The works of the Central Asphalt & Refining Co., located at Port Neches, Texas, about midway between Beaumont and Port Arthur, on the Neches River, were acquired by the company early in 1906. Additions and alterations were made, until now it is perhaps the largest asphalt manufacturing plant in the world. Gulf Coast crude is semi-asphaltic, and yields a percentage of asphalt by special processes peculiarly adapted for paving, roofing and waterproofing purposes.

The output of the Gulf Coast fields began to decline in 1905, and the stocks of oil held by the company, with demand greater than the supply, began to fall off also. No new fields were developed or in prospect, and the question of a permanent supply of crude on which to operate its refineries became vital to the best interests of the company. Development of the Oklahoma fields became prominent in 1906, and as the output assumed large proportions, and the further fact that oil produced in that region is better adapted to the manufacture of refined products than Gulf Coast crude, a pipe line to make this supply available was projected. To enable consummation of this project the capital stock of the company was increased from \$6,000,000 to \$12,000,000 early in 1907.

The Oklahoma-Gulf pipe line of the company is eight inches in diameter and capable of handling approximately 30,000 barrels a day of crude. Construction was begun early in 1907 and completed early in 1908. It extends from the Glenn pool, in Oklahoma, to a connection with the Gulf Coast system of pipe lines of the company at Humble, Texas. In addition to the construction of this line, with the necessary pumping stations, seven in number, over a distance of 452 miles, a refinery was established near Dallas, where the lighter portions of Oklahoma crude are taken from the oil and piped separately to Port Arthur, while the heavier or remaining portion is retained at Dallas to supply the fuel trade of North Texas. Oklahoma crude, being particularly well adapted to the manufacture of refined products, enabled the company to supply the world's markets with a better grade of oil than that obtained solely from the Gulf Coast crude, which is better adapted to the manufacture of asphalt or for fuel purposes.

The growth and expansion of the business of the company continued unabated in 1908, and near the close of the year the capital stock was increased from \$12,000,000 to \$18,000,000. The purpose of this increase is not stated, but it is natural to presume that it is intended to take care of new investments and growing business.

The company moved its general offices from Beaumont to Houston a year ago, and occupies four floors of the Stewart Building. It also has "overflow" offices in the Prince Theater Building, as the quarters in the Stewart were not sufficient to take care of the entire force.

J. S. Cullinan, formerly of Corsicana, has been president and general manager of the company since its organization; T. J. Donoghue is assistant to the president; Arnold Schlaet, vice-president; J. L. Autry, general attorney, and Judge R. E. Brooks, treasurer. R. C. Holmes is manager of the refining department; C. P. Dodge, manager of the Southern sales division, with headquarters at Houston; J. H. Littlefield, manager of the Mississippi River sales division, with offices at New Orleans; F. W. Freeman, manager of the Southwestern sales division, with headquarters at El Paso; W. T. Lemm of the

Central-Western sales division, with offices in St. Louis, and C. E. Woodbridge, manager of the Eastern sales division and export department, with headquarters at New York. The New York offices of the company are in the Whitehall Building.

## TO SAVE SOUTHERN INDUSTRY.

### Menace to Iron and Steel in "Free Raw Materials."

[Special Cor. Manufacturers' Record.]  
Birmingham, Ala., January 11.

One of the vital questions now confronting Birmingham and the surrounding district is how to head off the proposed reduction in the duty on pig-iron. The discovery of the Mesaba ore beds in the early nineties gave Birmingham a 10-year setback; free pig-iron, or any material reduction of the duty, would cause at least a partial repetition of the prostration that prevailed here from 1890 to 1900. In course of time Birmingham will have local industries enough to use up most, if not all, of its pig-iron output; but until that time arrives the North is the only market for the bulk of our surplus production. Much of this goes to points where nothing short of a tariff of \$4 a ton will enable it to compete with British importations. If our Southern statesmen could be induced to make a fight for this great Southern resource, not only would there be no reduction in the existing rate, but it might be raised to \$5 per ton. And that's what it ought to be, and not a cent less.

Certain Senators and Representatives may labor under the erroneous belief that farmers would be able to get wire and plows and nails and other things made of iron and steel cheaper if the tariff on pig-iron were reduced. But where iron has to be hauled 1000 miles to be converted into such things as farmers buy, involving an outlay of \$10 for labor to \$1 for pig-iron, plus freight charges going and coming, the farmer will never be able to find out where a reduction of this duty will save him a penny. That insidiously misleading argument, so popular in New England, in favor of cheaper raw materials may mean more profit to the manufacturing interests, but seldom, if ever, is that profit divided with the distant consumer. The farmers of Alabama will get more profit by reason of an expansion of the steel and iron industries of the State than they will ever get from the prostration of those industries for the benefit of far-away consumers of pig-iron as a "raw material." What is raw material for the Northern and Eastern manufacturer is a finished product from the Alabama point of view. And if ever there was an "infant industry," it is the manufacture of pig-iron and of steel products in this district; for, as compared with the magnitude into which this industry may be developed under fair treatment within the next 10 or 15 years, what we are producing here today is as the infant in arms to the full-grown man.

In order to bring people to understand the little-thought-of consequences of tariff changes, I find that it is necessary to conduct at least once in each decade a campaign of economic education. In 1894 the MANUFACTURERS' RECORD and a number of other newspapers carried on a campaign on this subject which saved the South from free coal and iron ore and lumber, and possibly free pig-iron. But I find that a large percentage of the very men who were then aroused to a full realization of what would be the disastrous effects to Southern industrial development of the schedule originally proposed in the Wilson bill are today asleep, or might as well be asleep, so far as they are exerting themselves to have their interests considered in the scheme of "revision" that will be threshed out after March 4 next. THOMAS P. GRASY.

## North Carolina Progress.

[Special Cor. Manufacturers' Record.]  
Raleigh, N. C., January 16.

Very active work is in progress on the five-mile "cut" of the inland waterway between Adams Creek and Core Creek, about seven miles from Beaufort, N. C. A suction dredge and clamshell dredge are on the Adams Creek end, and a suction dredge has come up from New Orleans to work on the Core Creek end. It is expected that this year four miles of the cut through solid ground will be made, the highest point of this being 10 feet above the water level on the Core Creek side. A great aid in keeping this section of the canal of uniform depth and free from mud is Adams Creek, which is entirely fresh water and is a foot and a half higher than Core Creek, which is soft and merely an estuary, and this will give a fine current flow.

Applications for charters are coming in, and already four cotton mills and two knitting mills have been chartered, the last charter going to the Southern Mill at Zebulon, a new but very progressive station in this county, on the Norfolk & Southern Railway.

In Northeastern North Carolina the news that the Norfolk & Southern Railway is to at once resume work upon and complete its five-and-one-half-mile bridge across Albemarle Sound at Edenton is hailed with delight. The work on this stopped a little more than a year ago, when each end had been pushed out into the broad sound a few hundred yards. There are no engineering difficulties, the water not being very deep and the bottom excellent. The total cost will approximate \$1,000,000, it is estimated.

The sawmill business in North Carolina is certainly making a very sharp advance, and mills are resuming work everywhere.

The last quarterly return of State, private and savings banks shows an increase of \$2,000,000 in resources as compared with the previous 12 months before. The next quarterly report, if present conditions continue, is expected to show everything normal.

## Hotel at Hickory.

[Special Cor. Manufacturers' Record.]  
Hickory, N. C., January 16.

As a result of work by the Hickory Chamber of Commerce, Dr. D. S. Fry and William P. Huffman, his brother-in-law, purchased today from N. M. Seagle the square on which his residence is situated as a site for a new hotel, the Huffry Inn. Architect W. Lee White is now preparing plans, and they will begin the construction at once of a first-class and up-to-date hotel, which is to be a four-story brick structure, 64 rooms, besides spacious dining-rooms, parlors, sample rooms, halls and corridors, all of which will be steam-heated. A private electric plant will furnish the lights and operate passenger and trunk elevators. There will be rooms en suite, with private baths and every modern convenience required by the most fastidious, besides simpler ample provisions, less pretentious, in order to meet any demand arising. The building will be so constructed that all rooms will have the advantage of sunshine and fresh air. There will be the main building and two wings, with an open court between. The location is slightly elevated, commanding a beautiful view of the Blue Ridge Mountains in the distance. A magnificent lawn, with shade trees, will surround the building. Walks and drives will be arranged so as to approach the hotel from either of the three streets on which it is located, and the whole arrangement as artistically executed as money and skill can make it. The building will involve an outlay of between \$60,000 and \$65,000, and will be built with

a view to making an addition of from 20 to 40 more rooms.

Mr. Huffman and Dr. Fry will have the management of the hotel in their own hands.

## Barboursville Activities.

[Special Cor. Manufacturers' Record.]  
Barboursville, Ky., January 18.

Messrs. Nimrod Lunsford, W. H. Dethridge and John Lawson will erect a four-story brick block to cost about \$40,000, and to contain two or three business rooms, theater and office rooms. Plans have been drawn by Architect Graf of Knoxville, but no contracts have been let. Ground for the building was purchased last month, \$5000 being paid for the site.

Mr. G. W. Tye will erect a three-story brick building, the lower floor to be used for storeroom and the upper floors for living suites. The Labeled Lodge of Odd Fellows will erect a three-story brick building to contain a business room and lodgerooms. No contracts have been let for either of these structures, which will be started this spring.

This winter the Barboursville Brick & Tile Co. will install additional machinery, to cost several thousand dollars. The plant now represents an investment of \$40,000.

Parker & Parker, merchants, have begun to erect a four-story brick business house; the Gibson Company has begun the erection of a two-story brick business house, and Miss Sallie Hoskins is erecting a similar building. The Jones Hotel, a three-story steel and concrete building, and Brown Hall, a five-story brick dormitory at the Barboursville Institute, have just been completed. L. C. Miller, merchant, plans to erect two brick business houses next summer. No contracts have been let. The Knox County Medical Society is starting a movement for a city hospital. A site has been donated, and such a building as is contemplated will probably be erected during the ensuing year. Two big factors in the city's growth are the new water-works system and the natural-gas system.

An important real-estate deal of the past week was the purchase of 3000 acres of coal property in the Four-Mile district by John Henry Wilson of this city and associates for \$153,000. A number of established coal operations are on the acreage, which is tapped by a railroad extension. The Continental Coal Corporation has been organized to consolidate the various plants on the property. Mr. Wilson and associates will not conduct any developments, but will extend the leases of the operating companies. W. S. HUDSON.

## Jacksonville Building.

The Builders' Exchange of Jacksonville, Fla., has elected Messrs. J. H. Kooker, president; W. P. Richardson and James Coons, vice-presidents; C. C. Bucci, treasurer; E. J. Gartley, secretary, and J. H. Boden, Robert McCarrell, S. A. Marshall, Fred Ogram, J. W. Ingram, D. L. Rathborne, L. F. Beerbower and G. P. Hall, directors. During the year permits were granted in the city for 819 buildings, of which 746 were frame and 73 reinforced concrete, steel, brick or stone, representing an investment of more than \$2,000,000. Secretary Gartley, in giving this information to the MANUFACTURERS' RECORD, adds:

"We have a live town. Considerable business is going on, and real estate is advancing."

The Retail Dealers' Hardware and Implement Association of Texas will have its annual convention at Dallas January 19-21.

### Uses of Flake Graphite.

Mr. Geo. E. Long, treasurer Joseph Dixon Crucible Co., Jersey City, N. J., writes to the MANUFACTURERS' RECORD:

"We have been very much interested in the article 'Graphite in the South,' by Dr. F. W. Ihne, president of the Southern Graphite Co., which appears in the MANUFACTURERS' RECORD of January 7. In the interest of graphite mining in the United States we ask permission to call your attention to one very serious error in the article. We quote:

"A large portion of crystalline graphite occurs laminated, in the form of fish scales, which scales are known by the name of 'flakes.' For that kind of graphite is the greatest demand, and it commands the highest price in the market. Graphite flakes are used for making crucibles and other strong heat-resisting articles."

"The error which we desire to call particular attention to is the statement that 'flake' graphite commands the highest price, and that flake graphite is in demand for the manufacture of crucibles and other heat-resisting articles. We are very large manufacturers of plumbago or graphite crucibles, and of the total output of crystalline graphite in the United States the Dixon Company has produced more than 60 per cent., so that of an annual average of 5,000,000 pounds our own mine has furnished more than 3,000,000 pounds, and we desire to make it clear that while we produce this quantity of flake graphite, and produce it at a lower price than the average price of the Ceylon graphite, we have found it inadvisable to use the flake graphite in the manufacture of crucibles. The results of our experiments have satisfied us that this form of graphite, namely, the flake, is not nearly as suitable as the more granular and massive form of crystalline graphite which comes from Ceylon."

"The importation of Ceylon graphite has averaged for the last 10 or 11 years about 14,000 or 15,000 tons, and of this amount 70 per cent. is used in the manufacture of crucibles, which would clearly indicate that the other crucible manufacturers are of the same opinion as the Dixon Company, and, in fact, as we are well acquainted with these manufacturers, it has been our privilege to talk with them on this subject, and we know that they are of the same opinion as the Dixon Company. Because of the lower cost of the United States graphite, some crucible manufacturers have attempted to make use of it to some degree. As to the relative amount of American graphite used in crucibles compared with the amount of Ceylon graphite used in crucibles, we would say that not more than 200 tons of American graphite could have been used in the manufacture of crucibles in the year 1907, as compared with 12,000 tons of Ceylon graphite; in other words, less than 2 per cent., and it is quite probable that much less than this was actually used."

"The word flake was originated by the Dixon Company as a distinctive name for the very thin 'fish-scale' like formation of Dixon's Ticonderoga graphite. That graphite has a peculiar value as a lubricant because of its smoothness, toughness and great endurance. When used in engine cylinders, for instance, it builds up the microscopic irregularities of the bearing surface, so that there is a graphite-to-graphite contact instead of a metal-to-metal contact. Amorphous graphite being usually in a fine powder when refined, washes out readily. The Ceylon graphite, although of foliated formation, has not the toughness, and the foliations are much thicker, and because of this thickness of foliation the Dixon Company some 30 years ago selected the word flake for its Ticonderoga graphite, which word had

previous to that time never been used. Today, however, the word flake is known throughout the world."

"Now, in the matter of graphite suitable for pencil-making. No graphite of any kind is mined or known to exist in the United States suitable for the manufacture of lead pencils. Quantities of suitable graphite, however, are found in Germany and Austria, while the only graphite mine in America is located at Sonora, Mexico, so that, correctly speaking, all graphite, whether for crucibles or for lead pencils, is found only in foreign countries."

### Southern Supply Men.

The executive committee of the Southern Supply and Machinery Dealers' Association is to meet at New Orleans February 4 to determine upon the place for holding the next convention. In making the call for the meeting Secretary Alvin M. Smith writes to the MANUFACTURERS' RECORD:

"We feel that our association has made great headway during the past year, as we have increased our membership considerably and have received most favorable consideration at the hands of the manufacturers, and can boast with pride that with one or two exceptions the maintenance of prices and cordial trade relations among our members have been maintained during the recent panic. The fresh impetus which has been given to business with the opening of the year sees our organization more compact and stronger than ever before. Our officers and members are working as a unit to bring about the most cordial and pleasant relations between our members and the manufacturers, and are working strictly on business lines for the promotion of the best interests of the supply and machinery trade."

The officers of the association are Messrs. J. C. Miller, Miller Supply Co., Huntington, W. Va., president; E. A. Peden, Peden Iron & Steel Co., Houston, Texas, and Perry Wall, Knight & Wall, Tampa, Fla., vice-presidents; Alvin M. Smith, Smith-Courtney Company, Richmond, Va., secretary and treasurer; J. A. Riechman, chairman, Riechman-Crosby Company, Memphis, Tenn.; E. F. Hartfelder, Hartfelder-Garbutt Company, Savannah, Ga.; H. C. Clark, Charlotte Supply Co., Charlotte, N. C., and Mallory Bedingfield, J. S. Schofield's Sons Company, Macon, Ga., executive committee.

### Greensville Water Power Co.

The MANUFACTURERS' RECORD is informed that the Greensville Water Power Co., W. Samuel Goodwyn, president, Emporia, Va., has completed all arrangements for the contract to construct its proposed plant. This contract has been awarded to Stamper Bros. & Ragland and E. T. D. Myers, Jr., Commonwealth Building, Richmond, Va. It involves a concrete dam 690 feet long by 40 feet high over the spillway, and 52 feet in height over wing walls. The power-house will also be of concrete, located near the south end of the dam, and will provide for four turbine wheels, with capacity of 700 horse-power each. The concrete will amount to about 14,000 cubic yards; the water will be backed about seven miles upstream, and will average about 800 feet in width. The cost, including machinery, will be about \$100,000. Stone for the work will be quarried 2000 feet above the site of the dam. The engineer is C. P. E. Burgwyn, Richmond.

### For Lithographers and Engravers.

Mr. H. Burns, secretary and treasurer of the Chamber of Commerce of Macon, Ga., writes to the MANUFACTURERS' RECORD that there is a good opening in his city for a lithographing and engraving establishment, as there is none there. He adds

that Macon is the headquarters of two railroads and has several large manufacturing industries, including cotton mills, knitting mills, lumber mills, cottonseed products mills and a tannery, many wholesale houses dealing in shoes, drugs, dry goods, furniture, hats, hardware and harness, several cotton warehouses and retail grocery houses.

### West Virginia Fruit.

At the annual stockholders' meeting of the Hampshire Orchard Co., held at the office of President William B. Cornwell at Fairmont, some facts were brought out indicating the growth of fruit-raising in West Virginia. In the eastern section of the State from the South Branch Valley alone more than \$1,000,000 worth of peaches was shipped last year, and the business is still in its infancy. During the season a solid fruit express train is run out of Romney every evening, delivering the fruit gathered 24 hours earlier on the New York market stalls by breakfast time. Much of this fruit is exported to London and Paris. The Hampshire Orchard Co. owns 1300 acres of land having upon it 38,000 peach trees and 5000 apple trees, some of which will come into bearing this year and the larger proportion next year. The company is preparing to build a narrow-gauge railroad extending for seven or eight miles over the orchard, and is installing a complete system of water-works.

### Big New Orleans Refinery.

It is understood that the American Sugar Refining Co. of New York intends to begin operating by the middle of March its big sugar refinery at New Orleans. This plant has been under construction for about eight years, and represents the investment of about \$6,000,000. It will have a daily capacity of about 12,000 barrels of sugar, electricity to be the motive power, and probably 1000 men to be employed. The main building is 14 stories high, and two others in the group are 12 and 9 stories high. The plant is located at Port Chalmette, near the city. It was previously described and illustrated in the MANUFACTURERS' RECORD.

The Board of Trade of Wheeling, W. Va., has elected Messrs. George W. Lutz, president; George Hook and George J. Mathison, vice-presidents, and Allen Brock, E. B. Carney, Thomas Carr, Clarke Hamilton, A. S. Hare, Robert Hazlett, W. B. Irvine, H. W. McLure, Dr. Robert J. Reed, S. M. Rice, C. A. Robinson, L. E. Sands, Joseph Speidel, George E. Stifel and W. Alfred Wilson, directors.

The North Carolina Architectural Association has elected Messrs. Joseph Leitner, Wilmington, president; William P. Rose, Greensboro, vice-president; Franklin Gordon, Charlotte, secretary and treasurer. The officers, with Messrs. Herbert W. Simpson, Newbern, and Willard G. Rogers, Charlotte, constitute the board of directors.

The Little Rock Packet Co. was incorporated last week with Messrs. W. N. Kavanaugh, president; Max Mayer, vice-president, and E. T. Reaves, secretary and treasurer, for the purpose of operating a line of steamboats on the Arkansas River, and with the possibility of developing coal lands.

The Board of Trade of Norfolk, Va., has elected Messrs. M. T. Cooke, president; John F. O'Connell and Harry K. Wolcott, vice-presidents; B. L. Bugg, W. S. Benston, E. C. Hathaway, Henry Kirn, John A. Lesner, W. W. Sale, F. O. Smith and W. H. Sargeant, directors.

## RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

### TWO NEW LINES IN TEXAS.

**Abilene & Southern and Stamford & Northwestern Said to Be Connected With Hill's Roads.**

An official letter to the MANUFACTURERS' RECORD says that the Abilene & Southern Railway Co. has been organized for the purpose of building a railroad from Abilene, Texas, south. The charter has been filed, and active work is now in progress between Abilene and Ballinger, Texas, 53 miles. The grading is about complete between Abilene and Winters, a distance of 38 miles, and the company is laying steel on the line south of Abilene now. It has not been definitely decided that the road will go south of Ballinger. The charter calls for a line 200 miles long.

Mr. Morgan Jones of Abilene, Texas, is president of the company; G. M. Dodge of Council Bluffs, Iowa, is vice-president; D. T. Bomar, Fort Worth, Texas, counsel, and W. E. Kaufman, Abilene, Texas, secretary and treasurer. The directors include the officials, and the other members of the board are Ed S. Hughes and J. W. Radford of Abilene, J. W. Broad of Fort Worth, C. A. Dooze and C. S. Miller of Ballinger.

President Jones has under his personal supervision the construction and equipment of the line, which will connect at Ballinger with the Gulf, Colorado & Santa Fe Railway. Percy Jones of Abilene is engineer in charge.

A press dispatch calls attention to the fact that Grenville M. Dodge is chairman of the Colorado & Southern Railroad, which is now known as one of J. J. Hill's roads, and Mr. Jones is an officer of the same system, with which connection will be made at Abilene. The charter provides for a main line from Abilene via Ballinger to Sonora, Texas, 160 miles, with a branch 40 miles long from Ballinger northwest. The authorized capital of the new road is \$200,000.

Another new railroad, which is also said to be connected with the Colorado & Southern and the Yoakum interests, is the Stamford & Northwestern Railway, the charter for which has just been approved by the Attorney-General of Texas. This line, as heretofore described, is to be built from Stamford, Texas, northwesterly 165 miles to Plainview, passing through Jones, Haskell, Stonewall, Kent, Dickens, Crosby, Floyd and Hale counties. It is, however, designed to finally extend into New Mexico; capital stock, \$170,000; headquarters at Stamford, Texas. The incorporators are W. T. Andrews, L. M. Buie, R. V. Colbert, F. S. Hastings, N. Leavitt, R. L. Penick, B. E. Sparks, A. W. Springer, E. A. Swenson, all of Stamford, Texas, and E. P. Swenson of New York.

An official letter to the MANUFACTURERS' RECORD says that the route from Stamford to Plainview will be 170 miles long. It will cross the Kansas City, Mexico & Orient Railway at or near Sagerico, in Haskell county, Texas, 15 miles northwest of Stamford. Smooth farming country is traversed. P. M. Johnston of St. Elmo, Ill., has the contract for completing the first 75 miles out from Stamford. P. G. Burns of Houston, Texas, is chief engineer.

This will open up a new and undeveloped country suitable for agriculture. The 75 miles reaches into the Spur Pasture, a ranch of 437,000 acres, three-fourths of which lands are agricultural and are on the market for sale. They are situated in Kent, Garza, Dickens and Crosby coun-



ties, Texas. Construction is now under way on the first section.

The officers are L. M. Buie, president; R. V. Colbert, vice-president; L. B. Peyton, secretary, all at Stamford, Texas; S. M. Hudson, treasurer, Fort Worth, Texas; James Steuart Mackie, assistant secretary and assistant treasurer, and L. E. Katzenbach, transfer agent, both at New York city. The directors include the president and vice-president, and E. P. Swenson of New York; A. W. Springer of Aspermont, Texas; R. L. Penick, F. S. Hastings, B. E. Sparks, N. Leavitt and E. A. Swenson of Stamford, Texas.

#### COAL MINES AND RAILWAY.

##### A Texas Proposition in Which New York and Pennsylvania Men Are Interested.

An official dispatch to the MANUFACTURERS' RECORD says that the Gulf, Texas & Western Railway Co. has arranged for 50 miles of steel rails for its proposed line, and contracts for grading should be addressed to John T. Witt, chief engineer, Jacksboro, Texas.

The following information is also given:

"The Gulf, Texas & Western Railroad Co. has been incorporated in New Jersey as a holding company for the Gulf, Texas & Western Railway Co., incorporated last year in Texas. The capital is \$12,500,000 of common stock. The incorporators are Joseph J. Jermyn of Scranton, one of the most prominent independent coal operators in the anthracite territory; George B. Jermyn, president of the Dime Bank of Scranton, and Samuel S. Moore.

"The operating company, which is controlled by the Messrs. Jermyn and their associates, has in course of construction a railroad 500 miles long from Burr's Ferry, Texas, on the Sabine River, to Benjamin, Knox county, Texas. The owners have 30,000 acres of coal land, which the road is designed to develop, and it is also proposed to serve a rich cotton country. Sixty miles of road west of Dallas have been graded.

"R. C. Megargel of Megargel & Co., 5 Nassau street, New York, is president of the operating company and interested with the Messrs. Jermyn in the entire proposition. Joseph J. Jermyn has just been made a special partner in Mr. Megargel's firm. Mr. Megargel is quoted as saying that the financing of the road was provided for at present, but that later the company expected to bond the line at the rate of \$20,000 a mile. None of the stock, he said, would be offered to the public."

The dispatch to the MANUFACTURERS' RECORD also says that the owners have forwarded to Texas a carload of mining equipment, including drills, etc., to open up their coal properties. The manager is not yet decided upon, but he will be an experienced miner from the Pennsylvania anthracite section. It is expected to open a mine with a capacity of 3000 tons per day and to ship coal by July 1. J. J. Jermyn of the Jermyn Coal Co. of Scranton, Pa., is to have charge from Scranton. The general manager is to be located at the coal fields in Texas.

The Lost Valley Coal Co., it appears, is the name of the Texas corporation controlling the mines. It was incorporated last April by T. D. Spencer and E. W. Nicholson of Jacksboro and J. W. Pinson of Dallas, Texas, with a capital stock of \$250,000. This data was then published in the MANUFACTURERS' RECORD, which also stated that Megargel & Co. were interested; furthermore, that the coal properties were in Jack and Young counties, Texas, on the Dallas & New Mexico Railroad, which the firm controlled. This line, which had been planned by others to run from Dallas into New Mexico, was later

merged into the larger plan, and the grading already done will now be utilized.

#### TEXAS SHORT LINE.

##### Extension to Quitman Immediately—Road Just Out of a Receivership.

The MANUFACTURERS' RECORD has received from an official a letter concerning the plans of the Texas Short Line as follows:

"The report you have is correct to the effect that the Texas Short Line Railway Co. has been taken out of the hands of a receiver. A syndicate, including T. B. Meeks and J. A. Germany of Grand Saline, Texas; the Commonwealth Trust Co. and the State Investment Co., both of St. Louis, and John B. Christensen of the same city, own all of the bonds and stocks of the railway company, and—after having purchased all preferred claims of every kind—the same were satisfied of record and a new set of officers and directors were elected and the receivership vacated and the railway property restored to the company on January 6.

"So far as we know, this is the first railway in the State of Texas to be taken out of the hands of a receiver without foreclosure since the recent panic.

"The plans are to extend the road at once to Quitman, and probably in the near future to extend the same north through Hopkins or Franklin, Delta and Lamar counties to a point on the Red River, connecting with the survey of the St. Louis & Oklahoma Southern Railway. Some consideration has also been given to an extension southward to a connection with the Texas & New Orleans, the Houston & Texas Central, the Trinity & Brazos Valley, the International & Great Northern and the Missouri, Kansas & Texas railways, possibly at Waco. The road may possibly become a part of the St. Louis & Oklahoma Southern system, which is largely controlled by the same interests.

"We are in the market for 40 coal cars, 6 box cars, 1 private car and 2 coaches. Correspondence relating to these should be addressed to John B. Christensen, Commonwealth Trust Building, St. Louis."

#### HARRIMAN'S LATEST.

##### Traffic Agreement With Kansas City Southern Gives Him Connecting Line.

A traffic agreement between the Kansas City Southern Railway and the Harriman lines has been reached, and will afford a north and south connecting line between the Union Pacific Railroad and the Southern Pacific Railway, both of the Harriman system. This will restore conditions which prevailed a few years ago, when Mr. Harriman was in the Kansas City Southern.

This announcement is particularly interesting, because it was expected after the recent deal of James J. Hill for the Colorado & Southern lines that Mr. Harriman would soon be looking for an arrangement to equal the Hill combination for reaching Gulf ports by a direct route. It was reported that a connection would be built between the Harriman lines on the south and the Harriman lines on the north by constructing a new road from Denison, Texas, the northern terminus of the Houston & Texas Central, and some point in Kansas on the Union Pacific. The traffic agreement makes unnecessary any haste about building a new road, but it is not improbable that the expected connection will be constructed in the next few years or some road may be acquired which would cover the route. The Missouri, Oklahoma & Gulf, for instance, which now operates about 100 miles of line between Wagoner and Lamar, Okla., is building southward to Denison, Texas, and it also projects an extension from

Wagoner northward. It is an independent proposition, but may land with one of the big systems.

#### ON THE STAKED PLAINS.

##### Construction of the Llano Estacado Railway Begun and Being Pushed.

A letter to the MANUFACTURERS' RECORD says that the construction of the Llano Estacado Railway was begun January 9 at Floydada, Texas. The line runs from Floydada, the county-seat of Floyd county, on the rich plains of the Panhandle country, northwest to a connection with another railroad and in the direction of Tulsa and Plainview.

The letter further says:

"The building of this road opens to the homeseeker and investor a section of Texas that is considered by those acquainted with it to be along the richest and most productive of this part of the State. Situated 100 miles south of Amarillo, its connections with the large centers and markets are excellent. The soil is deep and rich, with an abundant supply of pure water a short distance below the surface. In this section around the towns of Floydada and Lockney the land is being purchased, and values are increasing. On these fields could be found growing during the past season side by side, and often on the same farm, corn, wheat, cotton, Kaffir corn, maize, alfalfa, hay, etc., while vegetables, fruits and peanuts thrive. Cattle and poultry are also found in abundance.

"The region is high and healthy, and promises to become what its early settlers foresaw.

"The beginning of actual work upon the Llano Estacado Railway was made the occasion of a celebration by the town of Floydada that was joined in by the surrounding country. The work will be pushed rapidly."

#### MAY BUILD TO HOUSTON.

##### Wm. Kenefick's New Road Financed to Sherman and Survey Made Beyond.

An interesting announcement is made in a report published at Houston, Texas, saying that the Missouri, Oklahoma & Gulf Railroad has made a survey with the intention of extending its line to Houston. This line, which is being backed and built by William Kenefick of Kansas City, is now in operation south from Wagoner, Okla., via Muskogee to Lamar, Okla., with a couple of small branches, in all about 100 miles of line. The road is heading for Denison and Sherman, Texas, and the reported decision to ultimately extend it to Houston is a surprise.

H. S. Moore of Muskogee, where the headquarters of the railroad company are situated, is quoted as saying that Mr. Kenefick has just raised \$3,000,000 for the purpose of building to Sherman, and that the survey to Houston has been made in an almost straight line. If the deep-water plans for Houston are consummated, Mr. Moore is reported as saying, he had no doubt of the extension there. It is also intended to extend north to Kansas City, but when that is to be done is indefinite.

In conclusion, Mr. Moore is quoted as remarking that adverse legislation is holding back railroad construction in both Oklahoma and in Texas.

#### New Equipment, Rails, Etc.

The Seaboard Air Line has awarded contracts for new equipment amounting to nearly \$900,000, thus: 500 30-ton steel underframe box cars to the South Baltimore Steel Car & Foundry Co.; 200 50-ton steel phosphate cars to Barney & Smith, Dayton, Ohio; 50 50-ton ballast cars to the Rodger Ballast Car Co., Chicago; 15 passenger coaches to Barney & Smith; total cost of contracts, \$890,000. Deliv-

eries are to be made as soon as possible after April 1.

The Pennsylvania Railroad is reported in the market for about 5000 steel cars.

The St. Louis & San Francisco Railroad is reported to have ordered 20 locomotives, passenger and freight, which will be built at the shops of the Rock Island Company.

The Altus, Roswell & El Paso Railway, Altus, Okla., is reported in the market for rails and bridge steel.

The Florida East Coast Railway, it is reported, will purchase 8000 tons of rails.

The International & Great Northern Railroad is reported to contemplate the purchase of 22,000 tons of rails.

The Beaumont Traction Co., Beaumont, Texas, it is reported, will buy eight new cars.

The Norfolk & Western Railway is reported to have ordered the building of 325 freight cars at its Roanoke shops.

The American Locomotive Co. is reported to have completed the contract of the Harriman lines for 121 locomotives, consisting of 43 consolidation engines, 30 moguls, 10 Atlantics, 20 10-wheelers and 18 switchers.

The Goldsboro Traction Co., Goldsboro, N. C., is in the market for cars. E. T. Oliver of Raleigh, N. C., is manager; J. S. Oliver, Goldsboro, N. C., secretary and treasurer.

#### New Railway at Goldsboro.

Mr. E. T. Oliver, Raleigh, N. C., writes the MANUFACTURERS' RECORD that the Goldsboro Traction Co. was incorporated in that State with \$150,000 capital stock, of which \$45,000 is paid in. The officers are E. T. Oliver, president and general manager; S. L. Blackburn of Richmond, Va., vice-president; J. S. Oliver of Goldsboro, N. C., secretary and treasurer.

Continuing, he writes: "Our company has acquired land and will establish a park two and one-half miles out of Goldsboro, N. C. Arrangements have not as yet been made to go outside of Goldsboro, except to the park. We are constructing the road now; have about one mile of track laid. We have placed order for all electrical equipment except cars. We will construct the road ourselves."

The noted Seven Springs, a well-known health resort, is only 17 miles from Goldsboro, with no means of transportation.

Mr. J. S. Oliver, Goldsboro, N. C., informs the MANUFACTURERS' RECORD that the line for the present will extend from the new union passenger station to Revillo Park, passing through and connecting the city with East Goldsboro, the resident suburb. J. R. Edmunds, civil engineer, of Greensboro, N. C., is in charge. The country is level, with sandy soil, requiring little grading. The line will be rapidly extended to cover all parts of the city. The board of directors is composed of the officers and J. H. Trent and W. T. Oliver of Logan, W. Va. It is two and one-half miles from the Union Station to the park, and it is intended to have this completed and in operation by June 1.

#### Mt. Pleasant to Paris, Texas.

Mr. J. V. Moore, secretary of the Mt. Pleasant Commercial Club, Mt. Pleasant, Texas, writes the MANUFACTURERS' RECORD that the Paris & Mt. Pleasant Railroad Co. was organized on January 12 under his direction.

The officers are R. F. Scott of Paris, Texas, president; Sam Williams, vice-president; H. A. Wilson, second vice-president; R. J. Murphy, treasurer. The directors consist of the officers and J. J. Culberson, H. P. Mayer and A. N. Rogers of Paris, Texas; J. V. Moore and C. O. Lide of Mt. Pleasant, Texas; capital stock \$75,000, subscribed.

It is proposed to absorb 10 miles of

railroad already built out of Mt. Pleasant, leaving 40 miles to be constructed, with splendid terminals at each end. The line will connect with the Cotton Belt system, with the southern terminal of the Frisco at Paris; also with the Texas & Pacific, the Gulf, Colorado & Santa Fe and the Texas Midland. It is owned and controlled solely by Paris and Mt. Pleasant merchants, manufacturers, cotton buyers, bankers, etc. It will run through a large hardwood region, and also through rich black-land country. It will make five good towns en route. Work is to begin soon.

#### Rising Star to Eastland.

Concerning the proposed railroad from Rising Star to Eastland, Texas, the MANUFACTURERS' RECORD is informed that about a month ago V. R. Coon of Detroit, Mich., visited Rising Star and contracted with the business men there to build a railroad from Rising Star via Carbon to Eastland within 18 months, and the survey for the line was made by F. J. McDaniel of Dallas, Texas. The road will be known as the Eastland, Rising Star & Southern, and it will connect with the Texas & Pacific Railway at Eastland, and will cross the Texas Central Railroad at Carbon.

According to a press report, it appears that Mr. Coon and his associates will build the line upon a guarantee of free right of way and a small bonus. The route is described as excellent, passing through a fine farming and fruit-raising section. It is expected that construction will begin about April 1.

There is some talk that the road may be extended northward, and it is hinted that possibly it will become part of the Wichita Valley & Southern Railway.

#### Extension in Missouri.

An official letter to the MANUFACTURERS' RECORD confirms the report that the Williamsville, Greenville & St. Louis Railway Co. of Greenville, Mo., contemplates an extension from Cascade to Fredericktown. The letter also says:

"The survey of the route has been made under the direction of W. McBrown, a civil engineer of East St. Louis, Ill. The contract for the construction of the road has not up to this time been let, and no bids received.

"The length of the proposed extension is 23 miles, which will make the total mileage of the road 60 miles. The country traversed by the extension survey is very rough, and the construction will be a very difficult task, involving a large expenditure of money for purposes seldom met with in this part of the country."

#### Great Northern Reaches Jackson.

The New Orleans & Great Northern Railroad has completed its extension northward as far as Seigers Switch, about four miles south of Jackson, Miss., and is now able to reach that city with its trains by connection with the Illinois Central Railroad at the point named. While the rails are laid, the track is not yet ready for regular service—although construction trains are able to run to and from Jackson—because considerable surfacing, ballasting and ditching must be done before regular schedules can be established for freight and passenger trains. General Manager N. G. Pearsall is quoted as saying that about four months will be required to do all this work, but a press report says that regular train service may be established about February 1.

#### Work to Be Resumed at Macon.

Advices from Macon, Ga., are to the effect that President J. F. Hanson of the Central of Georgia Railway has authorized the construction of the proposed new

engine terminal at that city. It was at first intended to spend \$1,000,000 for the new shops at Macon, but when the work was under good headway the panic and business depression caused a cessation, and only about one-half of the proposed improvements were finished, although at an expense of about \$750,000. It is now intended to spend about \$250,000 on the new shop extensions, but this sum may be exceeded by the time the task is finished. In addition to the shop buildings, large sewers will have to be constructed, demanding considerable cement work.

#### Steel Tie, Frog and Switch.

Mr. D. R. L. Boyd, Hattiesburg, Miss., informs the MANUFACTURERS' RECORD that he is the inventor of a railroad cross-tie made of cast steel, with creosoted wooden cushions, to provide elasticity similar to that afforded by a wooden tie. The tie also has braces to keep the rails from spreading or turning over. He also has a safety frog and an automatic safety switch. He would like to dispose of the rights or to organize a stock company to manufacture these devices.

#### Survey Out of Waskom.

It was recently reported that the Missouri, Kansas & Texas Railway was securing rights of way for an extension out of Waskom, Texas. Concerning this an official of the company informs the MANUFACTURERS' RECORD a line was surveyed a few years ago for a branch from Waskom south, but, owing to conditions, nothing has yet been done with regard to building.

Gilbert H. Cobb has been appointed division freight agent of the Pennsylvania Railroad at 2 Beaver street, New York. John M. Gross has been appointed division freight agent at Baltimore and Calvert streets, Baltimore, to succeed Mr. Cobb. Wm. G. Spangle has been appointed division freight agent at Altoona, Pa., to succeed Mr. Gross.

## MINING

#### Wayne Land & Lumber Co.

The Wayne Land & Lumber Co. plans to develop the iron and timber resources of 80,000 acres of land near Greenville, Mo., the property having been purchased for about \$400,000. This company was mentioned by the MANUFACTURERS' RECORD last week as incorporated with a capital stock of \$2,500,000, the incorporators including J. T. Long, president of the Williamsville, Greenville & St. Louis Railroad, a 20-mile line to be constructed, offices at Greenville, Mo.; J. A. Plotner of Kansas City, Mo.; G. A. Long of Greenville, E. M. De Moe and W. N. Mitchell of Chicago. Correspondence regarding machinery, etc., should be addressed to W. N. Mitchell, 235 Railway Exchange, Chicago.

#### Mining Notes.

South Carolina mined in 1908, 33,693 tons of phosphate rock, a decrease under 1907 of 4521 tons.

Coal and coke loading in the New River field for December amounted to 502,040 tons of coal and 604 cars of coke.

Mr. W. B. Johnson of Palestine, Texas, writes to the MANUFACTURERS' RECORD that there are great deposits of iron ore, of lignite, of mica, of shales and of blue and yellow marl near his city.

The Dinamita Mining Co. of Charleston, W. Va., has incorporated with a capital stock of \$300,000. Its incorporators include E. T. Crawford, Walter L. Ashby, Frank Cox, John L. Dickinson and Malcolm Jackson, all of Charleston.

## TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

#### Laurinburg's New Mill.

The Waverly Cotton Mill has been incorporated with capital stock of \$300,000 to build at Laurinburg, N. C., the mill lately reported. As has been stated by the MANUFACTURERS' RECORD, the new enterprise is being formed by J. P. McRae, president of the Dickson Cotton Mill and the Scotland Cotton Mill of Laurinburg. Contracts for 18,000 spindles and other machinery have been awarded to the Mason Machine Works, Taunton, Mass.; the Kitson Machine Shop, Lowell, Mass., and others.

#### Contract for Electrical Equipment.

Leroy Springs, president of the Lancaster Cotton Mills, Lancaster, S. C.; the Eureka Cotton Mills and Springstein Mills, Chester, S. C., has awarded contract to the Westinghouse Electric & Manufacturing Co., Pittsburg, Pa., for the electrical equipment of the three plants mentioned. It is understood that about 3000 horse-power equipment will be installed. These mills operate a total of 103,044 spindles and 2570 looms.

#### The New Erwin Mill.

It has been reported during the past week that W. A. Erwin has begun the construction of a 50,000-spindle mill at Duke, N. C. Relative to this Mr. Erwin, who is treasurer of the Erwin Cotton Mills Co., West Durham, N. C., telegraphs the MANUFACTURERS' RECORD as follows: "Our directors have taken no action looking to the construction of the new mill; reports therefore to the contrary are premature."

#### Enlarging the Woodlawn Mill.

The Woodlawn Manufacturing Co. of Mt. Holly, N. C., has begun the construction of a one-story 75x100-foot addition, which will provide space for new machinery to be installed. This company is now operating 5120 ring spindles, driven by electricity, on the production of yarns.

#### Southern Spinning & Manufacturing Company.

The Southern Spinning & Manufacturing Co. of Zebulon, N. C., has been incorporated with a capital stock of \$300,000 by T. J. Horton, Z. M. Caviness and others.

#### Adds \$200,000 to Capital.

The Oriental Textile Mill of Houston, Texas, has increased its capital stock from \$100,000 to \$300,000. This company manufactures camel's-hair cloth for oil mills.

#### Textile Notes.

The Cornelius (N. C.) Cotton Mill is reported as to install a finishing plant.

The Denison (Texas) Cotton Mill Co. has ordered 96 looms additional to present equipment.

The Board of Trade, Acworth, Ga., is planning the establishment of a knitting mill and a cotton-rope factory.

A company will be organized with capital stock of \$100,000 to build a cotton mill at Slocomb, Ala. G. H. Malone is probably interested.

Messrs. J. M. Lang & Co. of Savannah report shipment of high-grade Florida phosphate rock through the port of Savannah during November to the amount of 9931 tons. Cargoes went to Antwerp, Hamburg, Rotterdam and Rendsburg.

## LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

#### Planning Big Cypress Mill.

The MANUFACTURERS' RECORD has received further particulars regarding the plans of the F. B. Williams Cypress Co., Patterson, La., mentioned last week. The company says: "We wired you a few days ago, giving all the information we have with reference to building our new mill. We expect this to be the most modern and largest cypress plant in the State, and it will produce an average of about 150,000 feet per day. It will have a capacity somewhat larger than this, depending largely upon the size and quality of the timber.

"We figure that by combining our two mills into one we can save in the neighborhood of \$1 per M. in our cost, and that we will be able to pay the entire expense of making the changes contemplated in three or four years.

"We will demolish both of our present plants, building the new plant on the site of the old mill, which is the site of the installation of the first band mill, the first steam 'nigger' and the first 'shotgun' feed south of the Ohio River. We are undecided as to whether or not we will install a steel or a wooden structure, but I am inclined to believe that a wooden structure will give us almost as good service and properly put up and equipped will be as nearly fireproof as a steel one. We anticipate having about 20 years more out at this point, with a possibility of a slight increase. It is possible that we may install electric machinery for the handling of the lumber from the mill to the pile, but as yet we have not gone deeply into this subject."

#### Georgia-Florida Lumbermen.

At the meeting last week of the Georgia-Florida Sawmill Association at Valdosta an important subject discussed was the tariff on lumber, the recent hearing before the ways and means committee of Congress causing many of the lumbermen to apprehend that some reduction is contemplated. Resolutions expressing the opinion of the association were adopted and telegraphed to the chairman of the ways and means committee. Each member of the committee drafting the resolutions was also requested to write the member of Congress from his district regarding the subject and was requested to induce representative manufacturers to do likewise. The next meeting of the association will be held at Jacksonville on February 16.

#### New Use for Old Field Pine.

It is announced that the South Atlantic Lumber Co. of Greensboro, N. C., W. L. Clement, secretary and treasurer, has received an order from a large box-manufacturing company of New York State for 10,000,000 feet of North Carolina pine box lumber to be supplied during the year. The New York company, it is stated, has tested the lumber manufactured from the field pines of North Carolina and found it superior for the manufacture of boxes to the spruce and white pine. An abundance of the timber is found in the northeastern part of North Carolina, and has heretofore been used principally for making piles.

The British steamer Catalina sailed last week from Wilmington, N. C., via Brunswick, Ga., for Liverpool with a cargo of 8000 barrels of rosin, valued at \$25,750. The shipment was consigned by Murchison & Co.



**MECHANICAL****J. S. Schofield's Sons Company.**

Included in the prominent machine works of the South are many important establishments that have become known not only in their own section, but in other parts of the country. One of these enterprises is the J. S. Schofield's Sons Com-

pany, which operates an extensive plant at Macon, Ga. quick and efficient handling of products. Two large internal furnace boilers, made by the company, a Corliss engine, electric generators and air compressors furnish power for driving the machinery, while two electric traveling cranes are constantly in use shifting ponderous machinery.

The company manufactures heavy-duty engines and high-grade boilers for all kinds of mills; towers and tanks, stacks, stand-

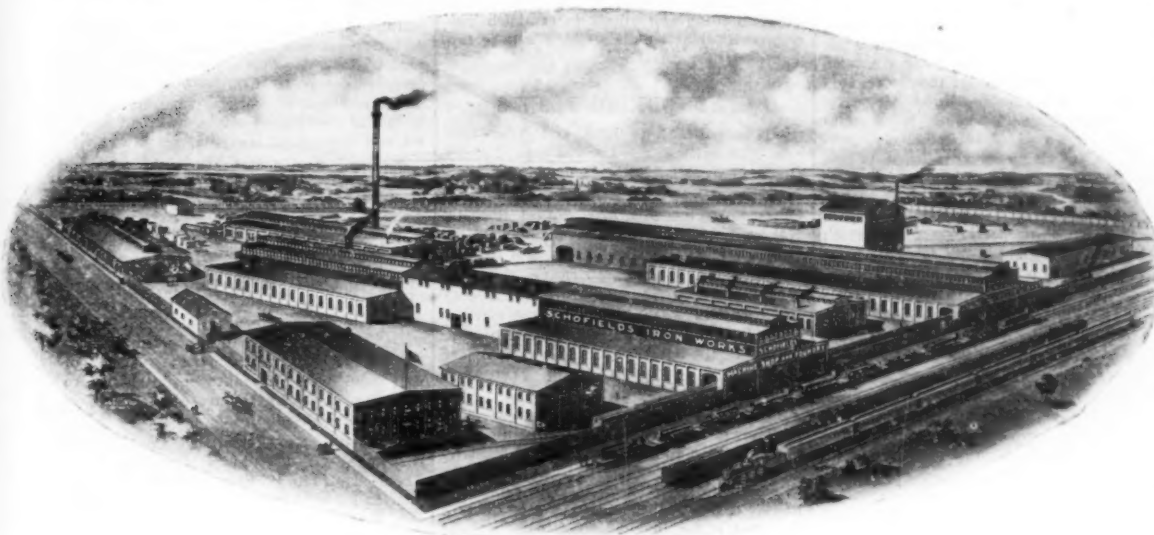
horse-power engine was carrying a 90-horse-power load. The company also had on exhibition a high-pressure boiler, which actually carried 250 pounds of steam; it was constructed not merely as an experiment, but as a permanent machine for practical use.

The Schofield company also carries on hand a large stock of machinery, including boilers of from 12 to 150 horse-power, to

has a cylinder of cast iron mounted on an open-hearth steel shaft, and the bearings are of the ring-oiling type. Two pulleys are furnished, one on each end of the shaft, which prevents unequal wear in the bearings and preserves the alignment of the rotating parts. The sides of the huller are so designed that the cylinder may be removed without disturbing the feeder. Both the cylinder and concave knives are made of the very best grade of charcoal iron, case-hardened, the case-hardening being done by an oil-burning furnace, in which an even and intense heat is maintained. The soft iron heart gives the knife great strength and toughness, while the case-hardening converts the cutting edges into a hard, high-grade steel. The Wells huller was patented in 1869, and the improved huller embodies the old cutting principle in a modern machine. There are over 1000 Wells hullers in operation. The company also manufactures the Livermore feeder and a lintar saw recutting machine, besides doing general foundry and machine work, including transmission machinery, cast and machine-cut gears, brass castings, pipe and pipe fitting, cast-iron columns, lintels and sills. The company also repairs oil-mill machinery. The Livermore Iron Stove Co., of which John Q. Davidson is manager, offers heavy hardware, roofing material, bolts, nuts, washers and gasoline engines. L. B. McFarland is president, and H. L. Alexander, secretary, of the Livermore Foundry & Machine Co.

**To Build Gas Engines.**

The Gibbs Gas Engine Co., reported incorporated last year in the MANUFACTURERS' RECORD with a paid-in capital stock of \$100,000, will build its main plant at Atlanta, but has not yet decided on plans. It will establish a branch plant at Jacksonville, Fla., for building marine engines, the cost of the machinery to be about \$5000. The Solomon-Norcross Company, 1621 Candler Building, Atlanta, Ga., is



J. S. SCHOFIELD'S SONS COMPANY'S PLANT.

pany, which operates an extensive plant at Macon, Ga.

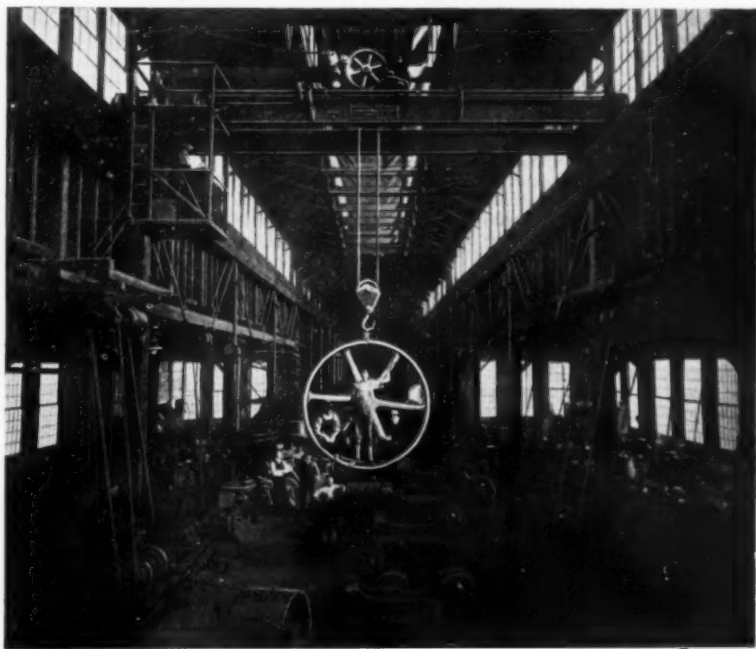
The enterprise was founded in 1855, when Macon was a mere village, and from a small beginning it has grown to its present extensive proportions, and the plant is designed and equipped in a manner to afford the facilities required for manufacturing the engines, boilers and other machinery for which the company has established a high reputation with users of power and other mechanical equipment.

pipes, and plate work of every description. It has sold immense boilers and engines for cottonseed-oil mills, distilling plants, ice factories, water-works, electric-light plants, brick plants and sawmills throughout this country, and has made shipments to Cuba, Mexico and Central America.

Recently at the Georgia State Fair an exhibit of a steam engine made by this company was successful in winning first honors in competition with other manufacturers. The engine was out of regular

carry a working pressure of 100, 125 or 150 pounds; center-crank engines, 10 to 100 horse-power; side-crank engines from 50 to 150 horse-power; all sizes and grades of belting, pulleys, shafting and general mill supplies.

A feature which has aided in the growth of this enterprise is railroad facilities. The Southern, Central of Georgia, Georgia Southern & Florida, Macon & Birmingham and Macon, Dublin & Savannah railways, radiate from Macon. By traffic arrangements the Seaboard Air Line,

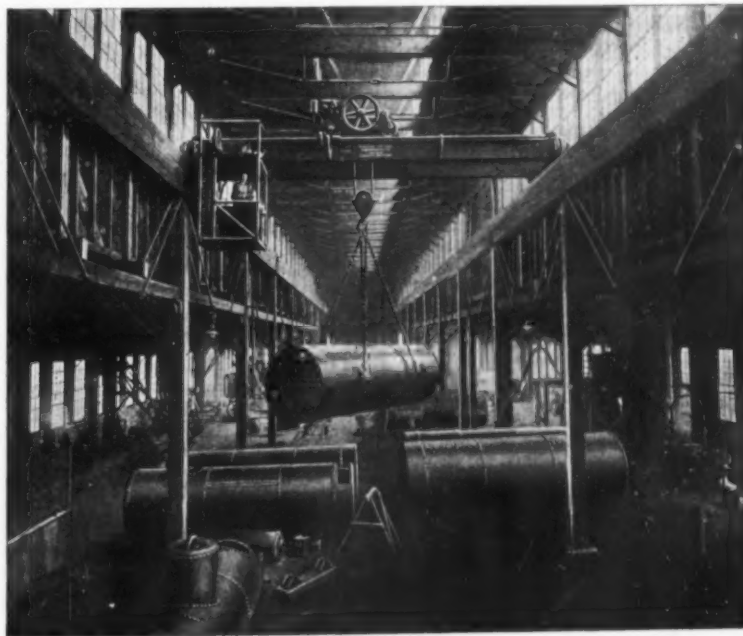


MACHINE SHOP, J. S. SCHOFIELD'S SONS COMPANY.

The buildings cover seven acres of ground, and are examples of substantial modern construction. They include a two-story office and storehouse, 80x225 feet; machine shop and foundry, 80x250 feet; boiler shop, 80x475 feet; blacksmith shop; sheet-iron shop; pattern shop; pattern storehouse, and power-house. Views are presented herewith of the entire plant and of the machine and boiler shops.

The equipment includes the accessories necessary to economical production and

stock, aluminum finish, massive and handsome, with perfectly regular and clocklike action, equipped with regular balanced valve and center crank. The company keeps similar machines in its plant ready for use in an emergency. Recently it became necessary to put one of its 40-horse-power engines into requisition to replace the big 200-horse-power Corliss engine regularly in use. This engine, under full load, was tested by an ammeter and disclosed the interesting fact that the 40-



BOILER SHOP, J. S. SCHOFIELD'S SONS COMPANY.

Atlantic Coast Line and Louisville & Nashville railroads are used.

A branch office has just been established at Charlotte, N. C., for the purpose of handling the Schofield company's large trade in the Virginia and Carolina territory.

**Modern Hullers and Feeders.**

The Livermore Foundry & Machine Co., Memphis, Tenn., is manufacturing the F. A. Wells cottonseed huller. This huller

the architect and engineer in charge of preparing building plans. The Gibbs Gas Engine Co. will manufacture gas and gasoline engines and hard-coal and soft-coal producers, and will have a gas engineering department in charge of George W. Gibbs, Jr., inventor of the engines, and G. Arkerlund. Its officers are Charleton G. Ogburn, president; G. R. Solomon, vice-president; Geo. W. Gibbs, Jr., superintendent-designer; offices, 701 Peters Building, Atlanta, Ga.

# Construction Department

## TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

### EXPLANATORY

The MANUFACTURERS' RECORD seems to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

### ADDRESS FULLY

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

### WRITE DIRECT

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

### BRIDGES, CULVERTS, VIADUCTS

Asheville, N. C.—Pulaski County Commissioners are interested in construction of bridge to span railway tracks and French Broad River, connecting Asheville and West Asheville; about 1000 feet long; roadway 24 feet wide; walk 6 feet wide; estimated cost, \$63,000.

Augusta, Ga.—City awarded contract to Roanoke Bridge Co., Roanoke, Va., at \$27,596 for construction complete, except piers, of steel bridge with draw span over Savannah River at Center street; eight spans, with total length of 928 feet, 20 feet wide in clear roadway, 16 feet high; sidewalks each 5 feet wide; Nisbet Wingfield, Commissioner of Public Works. (Recently mentioned.) F. J. Pagan will be resident engineer.

Baltimore, Md.—Board of Estimates and Board of Public Improvements have adopted plan of Isham Randolph, consulting engineer, Chicago, Ill., for abolishing grade crossings on Baltimore & Ohio Railroad south of Camden Station; this plan contemplates overhead crossings at Lee, Hamburg, West and Stockholm streets and closing of Barre-street crossing; crossings to be 53 feet wide, with driveway of 40 feet and sidewalks of 6 feet 6 inches on each side; cost to railway company estimated at \$3,000,000 to \$5,000,000; ordinance will soon be presented to City Council; railway company to consider crossings on Wells street, at Charles, Light and Hanover streets, not provided for in Randolph report; B. T. Fendall, City Engineer, City Hall; J. E. Greiner of Baltimore, consulting engineer of railway company.

Batesville, Miss.—Panola county will construct iron bridge over Coldwater River near Askew, Miss., and over Orr Creek, about three miles east of Sardis, Miss.; contract to be awarded February 1; R. W. Draper, clerk Board of Supervisors. (See "Machinery Wanted.")

Cape Charles, Va.—New York, Philadelphia & Norfolk Railroad Co., J. G. Rodgers superintendent, Cape Charles, contemplates, it is reported, construction of bridges.

Covington, Ky.—Wilbur J. Watson, Cleveland, Ohio, is preparing plans for viaduct to

be constructed across Willow River at estimated cost of \$38,000.

Cuero, Texas.—De Witt county will construct bridge across Guadalupe River near Hochheim, Texas; bids to be opened February 6; Rudolph Kleberg, Jr., County Judge. (See "Machinery Wanted.")

Edenton, N. C.—Norfolk & Southern Railway, Thomas Fitzgerald, general manager, awarded contract to McLean Contracting Co., 902-903 Maryland Trust Bldg., Baltimore, Md., for completion of bridge across Albemarle Sound from Skinner's Point to Mackies Ferry, N. C. As stated in December, structure is to be single-track railroad bridge, 27,730 feet long, mainly of pile trestlework, with four steel-plate girder spans of 50 feet each, and two steel bascule bridges, each giving clear opening of 140 feet; cost about \$1,000,000; \$500,000 allowed for completion.

Ferguson, S. C.—Santee River Cypress Lumber Co., recently noted to construct bridge over Santee River near Ferguson, has not decided on plans; is awaiting Congressional enactment conferring right to build bridge.

Fort Worth, Texas.—St. Louis Southwestern Railway, J. W. Maxwell, general superintendent, Tyler, Texas, will, it is reported, construct bridge across Trinity River in connection with construction of proposed terminals. (See "Railway Shops, Terminals, Roundhouses, etc.")

Galveston, Texas.—The railway officials and George E. Mann, Galveston County Judge, have signed the agreement between the railway companies and the county for the construction of the proposed causeway to connect Galveston Island with the mainland; plan includes construction of swing draw-bridge 280 feet long and 44 feet wide, providing 100-foot clear waterway for vessels, etc.; reinforced arch bridge 350 feet long on each end of draw, etc.; estimated cost, \$1,400,000; it is understood construction will soon be begun. (Other details previously reported.)

Harrisonburg, La.—Police Jury has authorized its president, N. R. Cotton, to advertise for bids for construction of Bayou Bushley bridge and repair of Jonesville bridge.

High Bridge, Ky.—Cincinnati, New Orleans & Texas Pacific Railway (Queen and Crescent Route), H. E. Warrington, chief engineer, Cincinnati, Ohio, has, it is reported, revised plans for construction of proposed bridge across Kentucky River near High Bridge; three spans of about 300 feet each and tower; designed for double track, but will be temporarily used for single track; steel required estimated at 3000 tons.

Lynchburg, Va.—Municipal Engineering Department is completing plans and specifications for viaduct to span new route of Southern Railway and Durham branch of Norfolk & Western Railway in 5th street; to be of reinforced concrete; girder pattern; cost about \$50,000, exclusive of approaches; H. L. Shaner, City Engineer. (Recently mentioned.)

Maryville, Tenn.—Blount County Court has appointed committee, composed of E. Hitch, Walland, Tenn.; J. S. Patty, Bank, Tenn., and W. L. Russell, South Rockford, Tenn., to investigate cost and receive bids for erection of two steel bridges across Little River; contract for building two bridges, one at Wellsville and other at Mint, recently referred to, has been awarded to Converse Bridge Co., Chattanooga, Tenn.; Clay Cunningham, County Court Clerk.

Meridian, Miss.—Contract will be let February 1 for construction of wooden bridge across Okitobeha Creek; W. R. Pistole, clerk. (See "Machinery Wanted.")

Montgomery, W. Va.—Montgomery & Cannellton Bridge Co. incorporated with \$50,000 capital stock by O. J. Henderson and M. J. Simms, Montgomery; W. E. Beardslee, Clarksburg, W. Va.; W. N. Conger, Oswego, N. Y.; Walter C. Hardy, Charleston, W. Va.

Spartanburg, S. C.—Spartanburg county will award contracts on following dates for bridge construction: January 22, January 23, January 28, February 2, February 4. D. M. Miles, County Supervisor; S. M. Bagwell, Clerk of Board. (See "Machinery Wanted.")

Temple, Texas.—Gulf, Colorado & Santa Fe Railway, C. F. W. Felt, chief engineer, Galveston, Texas, will construct viaduct over Adams street; 40 feet wide; cost \$25,000.

### CANNING AND PACKING PLANTS

Dodson, La.—Dodson Canning & Manufacturing Co., D. M. Pyburn, president, recently

noted to build and equip cannery for fruits, vegetables, syrups, etc., will erect building 40x80 feet; ordinary construction; cost \$1500; proposals for machinery to cost \$3000 to be opened February 1; daily capacity of plant, 5000 cans. (See "Machinery Wanted.")

Tulsa, Okla.—Company incorporated by George Failing and others to establish cannery; will erect building; plant will be furnished with natural gas.

### CLAYWORKING PLANTS

Barboursville, Ky.—Brick and Tile.—Barboursville Brick & Tile Co. will expend about \$40,000 to install additional machinery.

Coosada, Ala.—Pottery.—Coosada Pottery Co. incorporated with \$5000 capital stock by Warren H. Hakk, W. M. Beale and W. J. Junkins.

Eldorado, Ark.—Brick.—Eldorado Brick Works, recently reported incorporated with \$30,000 capital stock, has purchased machinery for plant; capacity, 20,000 common brick daily; I. R. Randolph, president; Alymer Fleniken, vice-president; L. S. Fitzgerald, secretary and treasurer.

Pooler, Ga.—Tile Roofing, Bricks, etc.—Geo. G. Baldwin has acquired an interest in Rothwell Brick & Manufacturing Co. and improvements will be made to plant; new machinery will be installed, plant worked to fullest capacity (20,000 daily) and will manufacture red roof tiling in connection with present products.

Sedalla, Mo.—Bricks.—McCusker Bros., Jamestown, N. Y., contemplate, it is reported, establishment of plant in Sedalla with capacity of 50,000 bricks daily and continuous kiln of 16 chambers.

Tulsa, Okla.—Brick.—Pittsburg Vitified Paving & Building Brick Co., Pittsburg, Kans., contemplates establishment of \$150,000 plant in Tulsa.

Valrico, Fla.—Bricks.—Valrico Sandstone Co., R. Cay, president, reported incorporated in December (under "Miscellaneous Manufacturing Plants"), will manufacture common and face brick; daily capacity, 35,000.

### COAL MINES AND COKE OVENS

Barboursville, Ky.—Interstate Coal Co. is erecting first of number of electric plants in Brush Creek field; company consolidated a number of plants about a year ago, all of which will be operated by electricity.

Birmingham, Ala.—G. B. Crowe, president of Yolande Coal & Coke Co., 1510 Brown-Marx Bldg., and associates reported as having purchased for development 80 acres of land in southern part of Jefferson county; plans said to contemplate organization of company to mine coal, construct 250 coke ovens, build two iron furnaces with daily output of 250 tons each, locate fire brick plant and other industrial enterprises, utilize gas and smoke from coke ovens for manufacture of power to be transmitted by electricity; to manufacture coke oven by-products, etc. An expenditure of from \$750,000 to \$1,000,000 is understood to be contemplated. Standard Fuel & Iron Co. (late reported incorporated) will be organized to undertake this enterprise.

Birmingham, Ala.—Hills Creek Coal Co., H. U. Milner, president, increased capital stock from \$30,000 to \$75,000.

Dorchester, Va.—Colonial Coal & Coke Co. has, it is reported, awarded contract to John Jenkins, Norton, Va., for building 75 coke ovens.

Charleston, W. Va.—Dynamite Mining Co. incorporated with \$300,000 capital stock by E. T. Crawford, Walter L. Ashby, Frank Cox and others.

Drifton, Ala.—O'Rear Coal Co. incorporated with \$25,000 capital stock by R. A. O'Rear, Calne O'Rear and Guy V. O'Rear.

Jacksboro, Texas.—Lost Valley Coal Co. (reported incorporated last April with \$250,000 capital stock) will at once begin development of its coal properties in Jack and Young counties; expects to open mine with daily output of 3000 tons; Jos. J. Jermyn of Jermyn Coal Co., Scranton, Pa., who is interested, will have charge from Scranton; manager, not yet appointed, will locate at Jacksboro; drills and other mine equipment have been purchased; Megargel & Co., 5 Nassau St., New York, are also interested.

Little Rock, Ark.—Little Rock Packet Co. incorporated with \$200,000 capital stock by W. M. Kavanaugh, Max Mayer, E. T. Reeves,

W. W. Dickinson and others; charter privileges include mining of coal and other minerals.

Louisville, Ky.—Samuel R. James Coal Co. incorporated with \$5000 capital stock by Samuel R. James, E. H. Clark and Margaret M. James.

Middlesboro, Ky.—American Coal Land Co., recently reported incorporated with \$120,000 capital stock, has purchased Four-Mile property, consisting of about 5000 acres of coal land; development work will be undertaken, including opening of mines, railroad building and location of sawmills.

Moberly, Mo.—Moberly Coal Co. incorporated with \$75,000 capital stock by Dana B. Cox, William H. Jones, Fred C. Kampff and others.

Morgantown, W. Va.—D. R. Davidson Coal & Coke Co. incorporated with capital stock of \$1,000,000 by D. R. Davidson, Louis R. Davidson and associates of the Union Drawn Steel Co., manufacturer of shafting, Beaver Falls, Pa.; new company reported as having purchased for development 300 acres of coal land near Morgantown, intending to mine coal and manufacture coke for use at its Beaver Falls and other plants.

Paintsville, Ky.—Investment Coal Co. incorporated with \$25,000 capital stock by A. N. Thomson, Hugh S. Bryer, Stuart H. Bowman and Josephine Colbert, all of Huntington, W. Va.; R. J. Warrick, Savannah, Ga.

Richards, Ky.—Southern Coal & Transportation Co. (recently stated to have purchased 8000 acres of coal lands) is installing plant of 2500 tons daily capacity; tipple, machinery, electric plant, etc., have already been contracted for and will be installed at once; company incorporated with \$500,000 capital stock by J. W. Miller and others.

### CONCRETE AND CEMENT PLANTS

Dallas, Texas.—Dr. J. H. Overton is organizing company for manufacture of cement and plaster; capacity to be 100 tons of plaster daily; machinery costing about \$11,000 will soon be installed; warehouse will be built in connection; company's capital, \$40,000.

### COTTON COMPRESSES AND GINS

Ashley, Miss.—J. W. Ashley will re-establish cotton gin in connection with sawmill recently noted to be rebuilt. (See "Machinery Wanted.")

Bailey, Texas.—Bailey Gin Co., recently reported incorporated with \$3000 capital stock by J. S. Collins, J. M. Salter and others, will continue operating cotton gin of 75 bales daily capacity.

Elgin, Texas.—Type Gin Co. incorporated with \$7000 capital stock by George Olander, August Smith, Elgin, and others.

Keevil, Ark.—Keevil Gin Co. incorporated with \$4000 capital stock; R. E. Smith, president; T. F. Bateman, vice-president; C. S. White, secretary and treasurer.

Leonard, Texas.—E. M. Bailey contemplates rebuilding cotton gin recently reported burned; no definite plans made.

Marianna, Ark.—Progressive Investment Co., Robert Lofton, president, recently reported incorporated with \$25,000 capital stock, contemplates installing cotton-gin equipment about September. (See "Machinery Wanted.")

Port Lavaca, Texas.—McKamey Bros. will, it is reported, establish cotton gin.

Rosser, Texas.—John F. Stanly will erect cotton gin at Rosser to replace gin at Trinity reported burned at loss of \$4500.

Somerville, Texas.—Somerville Gin Co. has increased capital stock from \$5000 to \$15,000 and changed name to Somerville Light Co.

### COTTONSEED-OIL MILLS

Brady, Texas.—Brady Cotton Oil Co. incorporated with \$50,000 capital stock by T. A. Hill, Ferdinand Hillje and Alfred Reissner.

Cuthbert, Ga.—Southern Cotton Oil Co., Augusta, Ga., contemplates establishment of cotton-oil mill in Cuthbert in connection with fertilizer plant. (See "Miscellaneous Manufacturing Plants.")

Douglasville, Ga.—Charles Geer promoting organization of company with \$30,000 capital stock to establish cottonseed-oil mill.

Townville, S. C.—John Bleckley, Anderson, S. C., has purchased Townville Oil Mills with capacity of 20 tons daily; extensive improvements probable.



## ELECTRIC-LIGHT AND POWER PLANTS

Baltimore, Md.—Park Board, Ferdinand C. Latrobe, president (office, Druid Hill Park), will expend about \$20,000 in improvements at Patterson Park, including installation of lighting system at bathing pool and on athletic field at cost of \$4500, completing paving of the mall at cost of about \$9000, lighting the mall and providing permanent seats, for which \$5000 of annual appropriation will be used, etc.

Bellevue, Ky.—City will establish electric-light plant mentioned in December; Geo. Hornung & Son, Johnson Bldg., Cincinnati, Ohio, engineers in charge, have prepared estimates; cost \$33,000. J. A. Cassidy, 223 Fallon Ave., Mayor.

Bryan, Texas.—City will vote on issuance of \$75,000 of bonds for construction of electric-light plant, sewer system and water works. J. T. Maloney, Mayor. (Recently mentioned.)

Cambridge, Md.—Cambridge Light & Power Co. (recently reported incorporated by R. B. Fentress, Seaboard Bank Bldg., Norfolk, Va.; Phillips L. Goldsborough, Custom-house, Baltimore, Md., and others) awarded contract to Wehr, Walden & Dukehart, engineer agents, Baltimore, for installation of plant of approximately 200-kilowatt capacity. W. H. Medford, Cambridge, also interested.

Denton, Texas.—Thomas F. Garey, 1004 McCulloh St., Baltimore, Md., has applied to Town Commissioners for franchise to light Denton with electricity; proposes to develop water-power at Spring Mills and transmit electricity to Denton, distance of about two miles.

Ellerton, Ga.—City will vote February 16 on issuance of \$5000 of bonds to increase capacity electric plant. Address The Mayor.

El Dorado, Ark.—El Dorado Light & Water Co., J. P. Holmes, president, recently reported with \$50,000 capital stock, has purchased electric-light plant; will not install additional power-plant machinery before September. (See "Water-Works.")

Eldorado Springs, Mo.—Eldorado Springs, Tiffin, Monogaw Springs & Lowry City Railroad Co., C. A. Edgar of Eldorado Springs, president, will locate power plant on Osage River.

Emporia, Va.—Greenesville Water Power Co., W. Samuel Goodwyn, president, completed final arrangements for awarding contract (reported in December) to Stamper Bros. & Ragland and E. T. D. Myers, Jr., Commonwealth Bank Bldg., Richmond, Va., for construction of hydro-electric plant; dam of concrete, 680 feet long by 40 feet high over spillway, and 52 feet in height over wing walls; power-house of concrete and equipped with four turbine wheels with capacity of 700 horse-power each; concrete will amount to about 14,000 cubic yards; water will be backed about seven miles up stream, and will average about 900 feet in width; cost, including machinery, about \$100,000; stone for work will be quarried about 2000 feet above site of dam; C. P. E. Burgwyn of Richmond is engineer.

Enid, Okla.—Storrs Bros. Electric Co. incorporated with \$5000 capital stock by William J. Kreider, Henry B. Storrs and George Storrs.

Jacksonville, Ala.—Cathoun Light & Power Co. incorporated with \$5000 capital stock by O. H. Herring, H. R. Rice and John P. Burk.

Kearneysville, W. Va.—Winchester & Washington City Railway Co., S. H. Hansbrough, president, Winchester, Va., is proceeding with construction of transmission lines to Bakertown, W. Va., and contemplates lines to Kearneysville and other points.

Knoxville, Tenn.—John W. Flenniken, chairman Board of Public Works, is estimating cost of installing dynamo in Commerce-avenue fire station and furnishing electric lights for this station, police headquarters and market-house.

Laurel, Miss.—A. B. Patterson, superintendent Meridian (Miss.) Light & Railway Co., has made no arrangements for constructing water-power electric plant at Laurel, recently mentioned.)

Mammoth Spring, Ark.—Mammoth Spring Electric Light Co. will rebuild burned electric-light plant.

Marble Falls, Texas.—Granite Manufacturing Co., J. H. Alexander, president, Dallas, Texas, has retained H. von Schon, Wayne County Bank Bldg., Detroit, Mich., as consulting engineer to report on possibilities of proposed water-power-electrical development (lately mentioned), considering water storage; he is now making surveys; company has stated plans contemplate steel and concrete dam 16 feet high, 1300 feet long; present development to provide 40-foot fall, and final

development 60-foot fall; to generate over 5000 horse-power; cost of initial plant estimated at \$250,000.

Mt. Olive, Miss.—Houston & Cunningham, 705 Maison Blanche, New Orleans, La., are, it is reported, preparing plans for electric-light plant to cost \$7000.

Nashville, Tenn.—Nashville Ice, Coal & Light Co., incorporated with \$25,000 capital stock; C. W. Dodson, president; O. O. Moore, vice-president; W. J. Peppard, secretary-treasurer.

Parr Shoals, Postoffice at Newberry, S. C.—Parr Shoals Power Co., Henry L. Parr, vice-president, has awarded contract to New York contractor for construction of dam for water-power-electric plant previously reported; expects to begin construction in early spring; cost of completed plant estimated at \$1,500,000.

Pineville, Ky.—Frank Gibson and D. B. Logan of Pineville and Mr. Hale, Knoxville, Tenn., have purchased Pineville Light & Ice Co.'s plant, and will rebuild same.

Terrell, Texas.—City Electric Light Co. will open proposals about February 10 for erection of electric-light plant recently noted; frame buildings, of ordinary construction, 48x92 feet, will be erected at cost of \$2000; steam and electric machinery to cost \$15,000 to be installed; W. C. Drake, engineer in charge; bids asked; copies of specifications furnished on application; E. R. Miller, City Clerk. (See "Machinery Wanted.")

Williamson, W. Va.—Norfolk & Western Railway, C. S. Churchill, chief engineer, Roanoke, Va., is arranging to build power-house, 50x100 feet, at Williamson.

## FLOUR, FEED AND MEAL MILLS

Birmingham, Ala.—Wood & Crabb Grain Co., recently noted to establish meal mill with capacity of 5000 bushels, will erect three-story mill, to be operated by electric power; modern grain elevator with capacity of 20,000 bushels; power-room where electric dynamos and other machinery will be located and storage warehouse; spur track will be constructed to plant.

Clifton Forge, Va.—J. M. Koerner will establish flour mill with capacity of 75 barrels daily.

Hargrove, N. C.—Tar Valley Roller Mills and Buena Vista Roller Mills incorporated with authorized capital stock of \$150,000; W. D. Kimball, president; W. R. Kimball, secretary and treasurer; are installing 75-barrel mill, and when this is completed will install 100-barrel mill. (Previously mentioned.)

Leesville, Va.—Owen & Hunt, Sycamore, Va., have purchased site of Leesville mill, previously burned, and will rebuild at once; capacity to be 50 or 75 barrels daily.

New Braunfels, Texas.—Flour Mills.—H. Dittlinger Roller Mills Co., recently reported incorporated with \$150,000 capital stock, will continue operation of roller mills, etc.; H. Dittlinger, president and manager; I. A. Ogden, first vice-president; O. O. Guenther, second vice-president; R. H. Wagenfuhr, secretary and treasurer.

San Marcos, Texas.—San Marcos Corn Goods Mill Co. organized by J. R. Porter, T. G. Oliver, S. R. Kone and others to manufacture grain products.

Smithfield, N. C.—Flour and Meal.—Smithfield Roller Mill Co., recently reported incorporated, purchased Neuse Milling Co. plant, fully equipped; daily capacity 75 barrels flour and 300 bushels meal; J. D. Underwood, president; R. O. Cotter, vice-president; J. D. Spiers, secretary and treasurer; O. R. Rand, general manager.

Seymour, Texas.—C. C. Mill, Elevator & Light Co. has increased capital stock from \$40,000 to \$50,000; changed name to Seymour Mill, Elevator & Light Co.; will install \$10,000 worth of new machinery and increase capacity from 100 to 200 barrels daily.

St. Louis, Mo.—Hunter-Robinson-Wenx Milling Co. incorporated with \$25,000 capital stock by Allen H. Clark, E. O. Hunter, C. C. Robinson and others.

Washington, N. C.—Grain.—Jonathan Havens will rebuild grist mill and hay and grain warehouse recently reported burned; plans by owner; contract to be awarded February 10; five-story brick structure; corn machinery to be purchased and installed. (See "Warehouses.")

## FOUNDRY AND MACHINE PLANTS

Atlanta, Ga.—Gas Engines, etc.—Gibbs Gas Engine Co., Charlton G. Ogburn, president, 701 Peters Bldg., Atlanta, has not fully decided on plans for main plant; will manufacture gas and gasoline engines and hard-coal and soft-coal producers, and will have gas-engineering department in charge of G. Arkerlund and G. W. Gibbs, Jr.; Solomon-

Norcross Company, Candler Bldg., Atlanta, architect and engineer in charge; capital stock \$100,000; branch plant to be established in Jacksonville, Fla., for building marine engines. (Previously noted.)

Baltimore, Md.—Machinery.—Clark Fefel Manufacturing Co., 101 North Frederick St., has leased warehouse at West street and Peach alley, five stories, brick, 85x167 feet; will alter and improve building and equip for manufacturing machinery.

Baltimore, Md.—Canning Machinery, etc.—Jones Machine Co., recently incorporated, manufactures canning machinery, automatic machines and general machine repair work and supplies; also develops drafting, designing, etc.; shop at 227 N. Holliday St.; office, 211 N. Calvert St.; Whitney W. Jones, treasurer and general manager.

Bessemer, Ala.—Soll Pipe.—Bessemer Soll Pipe Co. is preparing to double capacity of plant; will erect additional building and install new machinery.

Dadeville, Ala.—Engines.—Company is being organized to manufacture stationary engines of large and small horse-power, equipped with expansion valve-gear cylinders, patented by Ernest Turner; establishment of plant is under consideration; company is at present receiving bids for manufacture by contract. (See "Machinery Wanted.")

Enid, Okla.—Foundry.—Enid Foundry & Machine Shops incorporated with \$35,000 capital stock by H. C. Lang, J. A. Ham and J. W. Gettell.

Gadsden, Ala.—Car Repairing.—Gadsden Car Works will add to its operations the repair of steel cars, utilizing one of its buildings exclusively for this purpose; track will be laid to this building at once.

Gadsden, Ala.—Shovels.—Alabama Shovel Co. incorporated with Tom Norris, Pell City, Ala., president, and Ike Haas, vice-president, to operate shovel factory recently noted to be established by Norris & Marshall of Pell City; will erect building 40x150 feet; plant will have capacity of 190 shovels daily.

Houston, Texas.—Car Wheels.—Dickson Car Wheel Co., recently noted to erect addition, has purchased property, 218x500 feet, adjoining plant with view to future development; will not erect addition at present.

Jacksonville, Fla.—Marine Engines.—Gibbs Gas Engine Co., 701 Peters Bldg., Atlanta, Ga., will establish branch plant in Jacksonville for building marine engines; cost of machinery to be installed about \$5000. (See "Atlanta, Ga.")

Jacksonville, Fla.—Ditching Machines.—J. Q. Dickinson, 1217 Ionla St., contemplates arranging for manufacture of power ditching machine built of wood and metal and operated by gas engine or dynamo; plans and specifications have been completed; proposes to arrange for manufacture of the machines, and no contracts have been awarded. (See "Machinery Wanted.")

Kansas City, Mo.—Bridges.—Midland Bridge Co., 680 Gibraltar Bldg., recently noted to contemplate erection of bridge shop, will not build in the near future.

Norfolk, Va.—Machinery.—Hobbs-Ivey Machinery & Equipment Co. incorporated with \$25,000 capital stock; J. B. Ives, president; L. F. Hobbs, secretary and treasurer.

Oklahoma City, Okla.—Incinerator.—Conley Incinerator Co. incorporated with \$100,000 capital stock by S. J. Carpenter, Oklahoma City; Joseph Conley and E. B. Mitchell, Anadarko, Okla.

Tulsa, Okla.—Pulleys.—Oklahoma Iron Works will add to its plant the manufacture of pulleys invented by J. D. Dunlap.

## GAS AND OIL DEVELOPMENTS

Bartlesville, Okla.—H. H. Breene Company incorporated with \$10,000 capital stock by H. H. Breene, A. A. Smith and Burdette Blue.

Beaumont, Texas.—Vivian Oil Co. incorporated with \$5000 capital stock by John W. Henderson, M. A. Thompson, Jr., and Matt McAllister.

Monticello, Ky.—Stone Gap Oil, Gas & Coal Co., recently reported incorporated with \$30,000 capital stock (under "Ludlow, Ky."), will drill for oil and gas; Frank D. Crigler, president; Joel C. Clove, secretary and treasurer; Clay B. Steele, general manager.

Muskogee, Okla.—Kenneth Oil Co. incorporated with \$5000 capital stock by Edward H. Junk, James A. Peterson, both of Muskogee, and Frederick H. Wickett, Chicago, Ill.

Nowata, Okla.—Brookins Oil Co. incorporated with \$10,000 capital stock by B. L. Brookins, P. S. Powell, B. H. Robertson and E. B. Lawson.

Forum, Okla.—G. W. Yeridan Oil & Gas Co. incorporated by G. W. Yeridan, W. P. Parks, W. T. Hiller and others.

Rich Hill, Mo.—Rich Hill Natural Gas Co. incorporated with \$12,000 capital stock by H. M. Ruble, W. W. Cheventon, J. W. Jamison and others.

Tulsa, Okla.—City will vote February 16 on \$100,000 bond issue for construction of natural-gas pipe line. Address The Mayor.

## ICE AND COLD-STORAGE PLANTS

Birmingham, Ala.—E. C. Bowman contemplates construction of large cold-storage plant; plans, cost, etc., not ready for announcement.

Nashville, Ark.—Nashville Ice, Coal & Light Co. incorporated with \$25,000 capital stock; C. W. Dodson, president; O. O. Moore, vice-president; W. J. Peppard, secretary and treasurer.

Ocala, Fla.—Ocala Ice & Packing Co. will increase capacity of ice and cold-storage plants, install 30-ton ice plant to be used separately from one now in operation, and erect additional factory for new machinery.

Pineville, Ky.—Frank Gibson and D. B. Logan have purchased plant of Pineville Light & Ice Co., previously reported burned, and will rebuild and operate.

Savannah, Ga.—Savannah Ice & Cold Storage Co., recently noted incorporated and to establish ice and cold-storage plant, has purchased 35-ton plant; J. G. Nelson, president; J. C. Pastell, secretary and treasurer.

Waurika, Okla.—Waurika Ice & Electric Co., M. Griffin O'Neil, president, recently noted incorporated, will operate 35-ton ice plant.

Wichita Falls, Texas.—People's Ice Co. incorporated with \$25,000 capital stock by M. A. Marcus, Abe Marcus, both of Wichita Falls, and P. Marcus, Dallas, Texas.

## IRON AND STEEL PLANTS

Birmingham, Ala.—Iron Furnace.—G. B. Crowe, 1510 Brown-Marx Bldg., and associates reported as to build two iron furnaces with daily output of 250 tons each. (See "Coal Mines and Coke Ovens.")

Bristol, Tenn.—Rolling Mills.—Virginia Iron, Coal & Coke Co., John B. Newton, general manager, will soon resume operation of Crescent rolling mills; reported that Bristol iron furnace will be relined and operated again this year.

Dallas, Texas.—Iron Furnace.—N. P. Withington, manager of sales De Camp Bros. & Yule Iron, Coal & Coke Co., St. Louis, Mo., contemplates organization of company, as reported last month, to build iron furnace in Texas; plans have not matured.

Fairmont, W. Va.—Furnaces, Rolling Mill and Wire Mill.—Independent Steel & Wire Co., House Bldg., Pittsburgh, Pa., states that when specifications are ready it will advise the Manufacturers' Record full details of proposed plant at Fairmont; recent press dispatches reported this company as to build blast furnace with daily capacity of 350 tons; open-hearth furnace, daily capacity 400 to 500 tons; rolling mill, daily capacity 400 tons of rods; wire mill, capacity not stated; plant to occupy 700-acre site and reported to cost \$3,000,000.

Knoxville, Tenn.—Steel Plant.—Standard Steel Co. incorporated with \$50,000 capital stock by Charles M. Rodgers, W. B. Sullins, Walter McCoy and others.

Tennessee.—Tennessee Steel Co., lately reported incorporated with capital stock of \$20,000,000, is an organization to make possible the equitable distribution of certain holdings; can be addressed care of T. M. T. Raborg, 111 Broadway, New York.

Wheeling, W. Va.—H. S. Bradley, secretary Wheeling Mold & Foundry Co., states that company is not contemplating any improvements at present. (Recently incorrectly reported.)

## LUMBER-MANUFACTURING PLANTS

Augusta, Ga.—Industrial Lumber Co. will establish plant in Nellville.

Beaumont, Texas.—Industrial Lumber Co. has increased capital stock from \$3,000,000 to \$4,300,000.

Blum, Texas.—Blum Lumber Co. incorporated with \$8000 capital stock by Jason Broyles, Blum; T. A. Greer, Morgan, Texas, and Walter Robinson, Waco, Texas.

Brunswick, Ga.—Brunswick Remilling Co. incorporated with authorized capital stock of \$25,000 by J. H. Hopkins, L. P. Smith and E. C. Butts.

Clara (not a postoffice), Fla.—Theodore Glass and associates, Morganton, N. C., have purchased timber on tract at Clara and are now operating sawmill; have about completed arrangements for purchase on tract

containing 1100 acres estimated to yield 5000 feet of lumber to acre, and will install machinery.

Cottonport, La.—Avoyelles Cypress Co., E. B. Williams, president, has placed orders for machinery for lumber plant recently noted to be erected; daily capacity of 50,000 feet cypress lumber, 50,000 shingles and 30,000 lath; H. W. Taylor, vice-president and general manager, Cottonport. As previously stated, company is subsidiary to Southern Sawmill Co., 602 Maison Blanche, New Orleans. (Recently incorrectly noted located at "Cottonwood.")

Dayton, Va.—Heatwole-Kagey Company incorporated with \$15,000 capital stock; J. M. Kagey, president; W. D. Heatwole, secretary.

Dorton, Tenn.—Tennessee Timber Co., Crossville, Tenn., is planning to establish large capacity band mill near Dorton on tract of land containing several thousand acres of timber which company owns.

El Paso, Texas.—Union Lumber Co., Ltd., Alexandria, La., contemplates, it is reported, establishment of lumber mill in El Paso.

Etowah, Tenn.—Alacusey Lumber Co., main office, Binghamton, N. Y., did not purchase timber lands in Tennessee. (Recently incorrectly reported.)

Evergreen, Ala.—Gates-Irwin Lumber Co. will be incorporated by J. M. Gates, M. L. Gates and R. F. Irwin.

Fort Worth, Texas.—Rice Bros. Lumber Co. incorporated with \$30,000 capital stock by G. C. Rice, F. A. Rice and J. M. Sansom.

Gateswood, Ala.—Owens Naval Stores Co. incorporated with \$100,000 capital stock by W. D. Owens, T. A. Jennings and J. A. G. Carson, Jr.

Geneva, Ala.—Chancellor Lumber Co. incorporated by Y. A. Holman, E. M. Holman and J. D. Wilson.

Greensboro, Ala.—Hale Land & Lumber Co. incorporated with \$5000 capital stock by Charles Lichtman, Nettie Lichtman, W. M. Wedgworth and B. W. Wedgworth.

Greenville, Mo.—Wayne Land & Lumber Co. plans development of timber on 80,000 acres of land; correspondence relative to machinery, etc., should be addressed to W. N. Mitchell, 235 Railway Exchange, Chicago, Ill. (See "Mining.")

Higden, Ark.—Rice & Brown contemplate establishment of sawmill.

Houston, Texas.—J. B. Farthing Lumber Co. incorporated with \$25,000 capital stock by J. B. Farthing, B. F. Greenwood, N. Burton, Jr., and P. E. Bullington.

Houston, Texas.—Ohio-Texas Lumber Co., J. H. Conkle, president, has purchased plant of R. C. Miller Lumber Co., and will operate same in Houston under same name; will increase capital stock from \$50,000 to \$100,000, add hardwood mill to sawmill and planer, and make other improvements.

Leggett, Texas.—Thompson Bros. Lumber Co., Doucette, Texas, will establish plant at Leggett; capacity 125,000 feet daily and cost \$250,000.

Industrial, W. Va.—Richards Construction Co., recently noted to rebuild burned planing mill, states that loss was about \$5000; new building, probably of steel or concrete, to be erected soon; plans not yet made; company will temporarily occupy recently-purchased structure, now being remodeled.

Jackson, Miss.—Yellow Pine Lumber Co. incorporated with \$30,000 capital stock by A. E. Whortman, C. A. Shumann, R. P. Vincent and others.

Live Oak, Fla.—Live Oak Lumber Co. incorporated with George E. Porter, Jr., president and manager; has contracted for output of novelty factory.

Louisiana.—Washington Lumber Co. of Louisiana incorporated at Portland, Maine, with capital stock of \$1,000,000; C. E. Eaton, president; T. L. Croteau, treasurer; both of Portland.

Natchitoches Parish, La.—Louisiana Long-Leaf Lumber Co., Victoria, La., has, it is reported, purchased 637 acres of timbered school land in Natchitoches parish and will probably develop.

New Orleans, La.—Dixie Lumber & Building Co. incorporated with \$10,000 capital stock; Louis Centlivre, president; Arthur Dumaine, vice-president; Albert Fossier, secretary and treasurer.

Patterson, La.—F. B. Williams Cypress Co. contemplates installation of electric machinery for handling lumber from mill to pile at new plant recently noted to be erected at cost of \$100,000; daily output 150,000 feet lumber; building to be of steel or frame construction; plans and specifications being prepared; contract to be awarded within three weeks.

Sedgewick, Ark.—American Hardwood Co.

has increased capital stock from \$50,000 to \$100,000.

Sherrill, Ark.—Indianapolis National Supply Co., W. A. Omelvena, president, 320 Board of Trade Bldg., Indianapolis, Ind., has purchased Porto Rico place at Sherrill; 2000 acres, mostly in oak, hickory, ash and gum timber; sawmill will be installed, capacity about 20,000 feet lumber daily; cleared land will be cultivated; tenant-houses are being erected. (See "Machinery Wanted.")

Stillwater, Okla.—H. B. Bullen Coal & Lumber Co. incorporated with \$10,000 capital stock by H. B. Bullen, C. W. Bullen and W. G. Clingemfeel.

St. James Parish, La.—Louisiana Cypress Co., New Orleans, La., has purchased tract of timber land in St. James parish, containing about 50,000,000 feet of cypress, and will establish mill to cut the timber.

St. James Parish, La.—Lutcher & Moore Cypress Lumber Co., New Orleans, La., has purchased and will develop tract of timber containing about 150,000,000 feet of cypress in St. James parish.

St. Joseph, Mo.—Willis-Lucas Lumber Co. incorporated with \$110,000 capital stock by C. N. Willis, C. F. Lucas and D. L. Willis.

Tampa, Fla.—Hall & Bingham have, it is reported, purchased 3000-acre tract of timber land; will install mill and later establish town and erect station on Tampa Northern Railroad.

Valdosta, Ga.—Fender Lumber Co. will rebuild plant recently reported burned; will erect kiln, 24x100 feet; of brick construction; planers and molders to be installed; further plans not decided. (See "Machinery Wanted.")

## MINING

Candor, N. C.—Gold.—Mr. Fleming, New York, has purchased from M. L. Jones, receiver, Thomasville, N. C., property of Iola Mining Co. near Candor and will continue operating the mine.

Cedartown, Ga.—Iron.—Noble Iron Co. incorporated with \$28,000 capital stock by Mrs. R. E. Noble, Miss E. Noble, James E. Polk and others.

Greenville, Mo.—Iron.—Wayne Land & Lumber Co., reported incorporated last week with capital stock of \$2,500,000, has purchased 80,000 acres of iron lands at about \$400,000; will develop both iron and timber resources; detailed plans not determined as yet; incorporators include J. T. Long, president of Williamsville, Greenville & St. Louis Railroad, Greenville; correspondence regarding machinery, etc., should be addressed to W. N. Mitchell, 235 Railway Exchange, Chicago, Ill.

Jefferson City, Mo.—Lime.—Jefferson White Lime Co. incorporated with \$20,000 capital stock by Thomas Hogan, William J. Murphy and Francis X. Campbell.

Marcella, Ark.—Gold, Silver, etc.—Company recently noted incorporated with \$300,000 capital stock by C. H. Graham, Newport, Ark., and others, has not yet fully organized or made plans for operation; H. Bettes, LaHarpe, Kans., will be president; C. W. Graham, Newport, Ark., vice-president; J. H. Weber, La Harpe, secretary; company will need mining machinery, and contemplates installation of smelting plant later. (See "Machinery Wanted.")

Piedmont, Ala.—Peters Salt & Lumber Co. has, it is reported, purchased Monahan ore mines; will build spur track to mines and increase output.

Richmond, Va.—Granite.—Virginia Granite Co. incorporated with \$50,000 capital stock; J. Henry Brown, president and general manager; Young Jones, vice-president; L. F. Lewis, secretary.

Woodward, Okla.—Salt.—Woodward Salt Co. organized with \$100,000 capital stock by F. E. Gill, W. J. Martin, O. H. Pearson and others; has acquired 160 acres of salt plains, including artesian well, and will develop for salt deposits.

## MISCELLANEOUS CONSTRUCTION WORK

Alexandria, Va.—Levee.—Red River, Atchafalaya and Bayou Boeuf Levee District awarded contract to J. M. Sullivan to rebuild levee in front of Lewis plantation on Red River; about 33,000 cubic yards of earthwork; contract price, 11.93 cents per cubic yard. (Recently mentioned.)

Brownsville, Texas.—Canal.—Citrus Fruit Development Co., Noah Allen, president, will construct canal in connection with its development work near Chapin, in Hidalgo county. (See "Miscellaneous Enterprises.")

Charleston, S. C.—Seawall, etc.—J. G. Rhett, Mayor, is considering arrangements for construction of seawall and boulevards extend-

ing from White Point Gardens around Ashley River for three-quarters of a mile to Chisholm's mill; plans in contemplation provide for 60-foot driveway; cement seawall 4000 feet long, to cost about \$150,000; reclamation of land between seawall and shore line, etc.; entire project will probably involve expenditure of \$250,000.

Columbus, Miss.—Drainage.—Organization of Magawah Creek Drainage District of 22 square miles is contemplated; petition to be acted upon by Board of Supervisors in February; W. G. Evans, Corry Cocker and Colver Hardy, all of Columbus, commissioners representing petitioners.

Crowley, La.—Drainage.—Police Jury has adopted ordinance creating drainage district in Sixth ward, embracing Ebenezer, La.; district is four miles long and two miles wide.

Fayette, Miss.—Drainage.—Commissioners Gum Ridge Drainage District will award contracts February 1 for construction of system of canals and levees for the district; work contemplates approximately 140,000 cubic yards; about 5000 acres will be drained; \$40,000 of bonds will be issued. Further information can be obtained from C. H. Jenks, consulting and supervising engineer, Fayette. Recently mentioned. (See "Drainage" in "Machinery, etc., Wanted.")

Houston, Texas.—Canal Improvements.—Cane & Rice Belt Irrigation Co., recently noted to have increased capital stock from \$200,000 to \$300,000, awarded contracts aggregating \$15,000 to Bramer & Brown and W. S. Delaney of Houston for widening and lengthening irrigation canal near Fulshear and Clodine; work will begin immediately, and company expects to water 15,000 acres of land. J. M. Frost is president.

Jonesville, La.—Drainage.—Joseph E. Perez, Dreyfus, La., has contracted with owners of Llanada and Auckland plantations to plant 1000 acres in rice, and arrangements will soon be made to prepare land, install pumps and construct lateral ditches.

Norfolk, Va.—Dredging.—Atlantic Dredging Co., Philadelphia, Pa., is lowest bidder at 17 cents per yard for removing about 12,000 cubic yards of mud from Deep Creek entrance to Dismal Swamp.

Richmond, Va.—Wharves.—Subcommittee, under advice of Charles E. Bolling, City Engineer, has prepared plans, which were presented to committee on improvement of James River, for placing bulkheads or piles along newly-acquired water front of city from mouth of Gillie's Creek to Nicholson street; by running line of piles off shore at some points new harbor line will be made at 18-foot channel without dredging; frontage is between 900 and 900 feet, which, after filling in behind bulkheads with mud and sand from river, will be made into wharf; estimated cost \$25,000.

Sulphur, La.—Canal.—Union Sulphur Co. will extend canal to Houston River for its water supply and install pumping plant; canal when completed will be about four miles long.

Tallahassee, Fla.—Drainage.—Internal Improvement Board of Florida conveyed 13,600 acres of land in the Everglades to Smiley M. Tatum of Miami, Fla., for \$31,200.

## MISCELLANEOUS ENTERPRISES

Anniston, Ala.—Mercantile.—Aderhald Mercantile Co. incorporated with \$6000 capital stock by J. E. Aderhald, J. D. Henry and J. W. Mallory.

Baltimore, Md.—Land Improvement.—Gulford Park Co., William H. Grafflin, president, Vickers Bldg., has had plans prepared by Frederick Law Olmsted, Boston, Mass., for development of Gulford (Abell property), consisting of 236 acres, bounded by Cold Spring lane, University parkway, Merriam's lane and York road; roads, driveways and avenues will be cut through, which, to preserve parklike appearance, will deviate from usual system of new streets; 39th street will be macadamized and number of dwellings will be erected. (Previously noted.)

Baltimore, Md.—Steamboat Line.—Baltimore Steamboat Co. incorporated with \$80,000 capital stock by Walter R. Langley of Walter R. Langley & Bro., 131 Fell's Point Market; Lewis H. Davenport, 405 Pearl street, and others; company is reorganization of former Baltimore Steamboat Co.

Baltimore, Md.—Printing.—Baltimore City Printing & Binding Co., E. J. Loranger, president, 153 Equitable Building, recently incorporated, operates plant with daily capacity of 200,000 ems linotype composition.

Bearcreek, N. C.—Mercantile.—Union Supply Co. incorporated with \$30,000 capital stock by W. P. Dark, W. L. Phillips and others.

Belle Helene, La.—Plantation.—Babin Bros., Ltd., incorporated with \$10,000 capital stock by Cyrille Babin, Henry Babin, Ignace Babin and James A. Godfrey.

Beaumont, Texas.—Land Development.—Gulf Coast Land Co. incorporated with \$50,000 capital stock by Gilbert Seaman, Milwaukee, Wis.; company owns about 4000 acres of fruit land near Beaumont, and will develop same.

Beckley, W. Va.—Hardware.—Raleigh Hardware Co. incorporated with \$50,000 capital stock by M. W. Moss, J. L. Baumgardner and C. H. Moss.

Birmingham, Ala.—Grain Elevator.—Wood & Crabbe Grain Co. will establish grain elevator with capacity of 20,000 bushels.

Brownsville, Texas.—Land Development.—Citrus Fruit Development Co. incorporated with \$35,000 capital stock; Noah Allen, president and general attorney; J. W. Davis, vice-president and chief engineer; H. H. Banker, secretary and treasurer; purchased 5545 acres of land near Chapin to divide into 100-acre and smaller tracts, construct canal, sink several wells and build town in center of track of San Antonio & Rio Grande Railroad.

Canyon, Texas.—Coal Elevator.—Canyon Coal & Elevator Co. incorporated with \$12,000 capital stock by R. E. Baird, G. G. Foster, W. B. Campbell and others.

Charlotte, N. C.—Abattoir.—Union Stock & Abattoir Co. incorporated with \$125,000 capital stock by R. C. McManus, Felix Hayman and Adam Fisher; company will take over and operate abattoir erected by Arnold M. Shaw. (Recently noted.)

Charlotte, N. C.—R. N. Hunter Company incorporated with \$10,000 capital stock by R. N. Hunter, J. A. Nisbet and W. A. Nisbet.

Chattanooga, Tenn.—Gasoline Lighting Appliance.—Chattanooga Lighting Co. incorporated with \$10,000 capital stock by A. A. McGregor, O. A. Lane, Wallace C. Bathman and others, to install lighting systems with gasoline plant; offices in James Building.

Chattanooga, Tenn.—Publishing.—Chattanooga News Company incorporated with \$100,000 capital stock; Geo. F. Milton, president; Curtis B. Johnson, vice-president; Walter C. Johnson, secretary and treasurer; will publish Chattanooga News.

Chattanooga, Tenn.—Tobacco.—Peoples-Pitner Company, 602 Market St., incorporated with \$50,000 capital stock by J. R. Pitner, M. F. Pitner, J. C. Norton and others; takes over wholesale tobacco business of Peoples & Pitner Bros.; company not yet organized.

Clarksburg, W. Va.—Land Improvement.—Weir Improvement Co., recently reported incorporated with \$20,000 capital stock, has acquired dwelling-houses and land and will erect houses and operate general stores; probably no contracts let before 30 or 60 days; E. T. Weir, president; J. C. Williams, vice-president; D. M. Weir, secretary and treasurer.

Columbia, S. C.—Hardware.—Ruff Hardware Co. will be incorporated by Thomas B. Ruff, O. F. Taylor and others.

Covington, Tenn.—Supplies.—People's Supply Co. incorporated with \$5000 capital stock by T. L. Bringle, G. W. Billings, H. S. Billings and others.

Dyersburg, Tenn.—Supplies.—Templeton Supply Co. incorporated by C. W. Moore, B. C. Dunlap, A. B. Mulherin and others.

Dyersburg, Tenn.—Vehicles and Implements.—Dyersburg Vehicle & Implement Co. incorporated with \$5000 capital stock by H. N. Beard, W. S. Riden, L. G. Norvell and others.

Elgin, Texas.—Hardware.—Sellstrom Hardware Co. incorporated with \$20,000 capital stock by E. W. Anderson, Albert Sellstrom, A. F. Anderson, Jr., all of Elgin, and J. E. Sellstrom, Manor, Texas.

Enid, Okla.—Electrical Contractors.—Storrs Bros. Electric Co. incorporated with \$5000 capital stock by Wm. J. Kreider, Henry, Bo and George Storrs.

Enid, Okla.—Hardware.—Gray Hardware Co. incorporated with \$20,000 capital stock by J. T. Gray, W. M. Anderson and E. Gray.

Eupora, Miss.—Planters' Supplies.—Farmers' Supply Co. incorporated with \$10,000 capital stock by T. M. Coleman, L. L. Barrett, J. M. Moore and others.

Fort Worth, Texas.—Mercantile.—C. C. Conger Company incorporated with \$40,000 capital stock by C. C. Conger, A. A. Conger, G. W. Scheussler, all of Fort Worth, and G. W. Stearn, Dallas, Texas.

Fort Worth, Texas.—Supplies.—Southwestern Supply Co. incorporated with \$20,000 capital stock by J. B. Newhall, H. H. Hardy and S. E. Starn.

Glade Springs, Va.—Plumbing.—Wildasin &



Morris incorporated with \$5000 capital stock; C. E. Wildasin, president; C. K. Morris, vice-president, secretary and treasurer.

Glade Springs, Va.—Farm Implements.—Morris Machinery Co. incorporated with \$15,000 capital stock; S. W. Keys, Glade Springs, president; T. B. Porterfield, Broadford, Va., vice-president; W. S. Morris, Glade Springs, secretary and treasurer.

Goldsboro, N. C.—Park.—Goldsboro Traction Co., E. T. Oliver, general manager, recently incorporated with \$150,000 capital stock, has acquired land and will establish park about two and one-half miles from Goldsboro; company is constructing railway, and has ordered all electrical equipment excepting cars. (See "Machinery Wanted.")

Hendersonville, N. C.—Land Improvement. Columbia Park Land & Improvement Co., recently reported incorporated, has elected H. S. Anderson president, F. Wrenn vice-president, R. F. Burton secretary and treasurer, J. W. Streetman manager; capital stock, \$80,000, with privilege of increasing; plans not fully matured; contemplated to develop Columbia Park, in southwestern part of Hendersonville; development to include erection of about 300 cottages, completion of 50-room hotel now being constructed, and building of 150-room Columbia Park Hotel; small lake, nine-hole-course golf links and erection of brick storehouses are also in contemplation.

Houston, Texas.—Transfer.—Texas Transfer Co. incorporated with \$20,000 capital stock by Ed F. Dupree, Ben S. Davidson and Dave A. Weiss.

Huntsville, Ala.—Feed and Grain.—Demaster Grain & Feed Co. incorporated with Archie C. Demaster president and general manager.

Jacksonville, Fla.—Steamship Line.—American & West Indian Steamship Co. incorporated with Edwin Southers, Jacksonville, president; David M. Gornito, Starke, secretary and treasurer; will establish steamship lines on Atlantic and Gulf, one to operate between Jacksonville and Cuba.

Lawton, Okla.—Bottling.—Kallum Mineral Wells Co., recently reported incorporated, will establish plant to bottle mineral water; James Corn, president; A. E. Hammond, secretary; W. C. Dillon, treasurer and general manager. (See "Machinery Wanted.")

Lexington, N. C.—Hardware.—Davidson Hardware Co. incorporated with \$50,000 capital stock by J. W. Noell, Dermot Shemwell and S. L. Owen.

Lissie, Texas.—Grain Elevator.—Lissie Elevator Co. incorporated with \$8000 capital stock by John N. Lee, J. M. Everett, Frank Hough and H. J. Follett.

Louisville, Ky.—Machinery, etc.—Rebuilt Machinery & Wrecking Co. incorporated with \$7000 capital stock by W. S. Brentlinger, Augustus Miller and John Amos Hillerich.

Lumberton, N. C.—Mercantile.—White & Gough incorporated with \$100,000 capital stock by A. E. White, Frank Gough and John French.

Macon, Ga.—Bottling.—White Elk Springs Water Co. incorporated with \$60,000 capital stock by W. J. Massee, B. P. O'Neal, Felton Hatcher and others.

Marion, N. C.—Contracting.—Hewitt Construction Co. incorporated with \$50,000 capital stock by A. R. Buffaloe, A. E. Hewitt and O. J. Holler.

Micro, N. C.—Supplies.—Micro Supply Co. incorporated with \$15,000 capital stock by W. R. Hales, Perry Hales and others.

Mobile, Ala.—Land Improvement.—Mobile Land Co., recently reported incorporated, has nominal capital of \$5000; has acquired 1000 acres of land in Mobile county; contemplates suburban and town development; plans not perfected; main office, 842 Equitable Bldg., Baltimore, Md.; Wm. E. Ferguson, Herbert E. Gibson and others of Baltimore, directors; S. R. Gaillard, representative at Mobile, 66 St. Francis St.

Mobile, Ala.—Fuel, Building Material, etc. Southern Fuel & Material Co. incorporated with \$10,000 capital stock; R. H. Radcliff, president; R. D. Harrison, vice-president; John S. Radcliff, general manager and treasurer.

Morgantown, W. Va.—Land Development.—Morgantown Security & Development Co. incorporated with \$10,000 capital stock by Harry Saunders, J. S. Brand, George E. Caldwell and others.

Morgantown, W. Va.—Land Development.—Morgantown Security & Development Co. incorporated with \$10,000 capital stock by Harry Sanders, J. S. Brand, George E. Caldwell and others.

New Orleans, La.—Shoes.—Steinau Shoe Co. incorporated with \$25,000 capital stock by Joseph L. Steinau, Meyer Elsmann and Philip Passalacqua.

New Orleans, La.—Plumbing.—Crescent Plumbing Co. incorporated with \$5000 capital stock by Harry Hirsch, E. C. Hanselman, Jacob Dresner and others.

New Orleans, La.—Land Improvement.—Vizard Improvement Co. incorporated with \$100,000 capital stock by William Vizard, Anthony Vizard, J. V. Finney and others.

New Orleans, La.—Grain Elevator.—Otis Elevator Co. has purchased Peter O'Brien's elevator plant; will erect new building to be used as office, local salesroom and storage-rooms.

Newport News, Va.—Laundry.—Robt. L. Barnett, 3206 Washington St., will erect building for laundry recently mentioned; building 50x100 feet; one story; brick, with boiler-room outside; ordinary construction; cost about \$7000; plans by Holtzclaw Bros., Hampton, Va.; will open proposals about April 1 on machinery to cost approximately \$10,000. (See "Machinery Wanted.")

Norfolk, Va.—Mercantile.—Miller, Rhoads & Swartz incorporated with \$500,000 capital stock; W. G. Swartz, president, Norfolk; L. O. Miller, vice-president; W. S. Rhoads, secretary, both of Richmond, Va.

Norfolk, Va.—Machinery and Mill Supplies. John D. Westbrook Company incorporated with \$40,000 capital stock; John D. Westbrook, president; E. M. Hall, secretary, and Fred B. Hill, treasurer.

Norfolk, Va.—Ships.—A. B. Johnson Company incorporated with \$10,000 capital stock; A. B. Johnson, president; S. Johnson, vice-president; W. A. Howard, secretary and treasurer.

Norfolk, Va.—Land Improvement.—Main Street Real Estate Corporation incorporated with \$50,000 capital stock; R. F. Baldwin, president and treasurer; W. H. T. Loyall, vice-president; James E. Heath, secretary and treasurer.

Oklahoma City, Okla.—Crushed Stone and Sand.—Rock Creek Crushed Stone & Sand Co. incorporated with \$5000 capital stock by C. C. Buxton, D. H. Boyd and W. H. Wyckoff.

Oklahoma City, Okla.—Printing.—Peerless Press incorporated with \$25,000 capital stock by J. C. Holden, F. E. Harkness and H. H. Little.

Oklahoma City, Okla.—Electrical Specialties.—Electric Home Specialty Co. incorporated with \$5000 capital stock by Otto W. Hauck, Ed Nix and C. P. Walker.

Okmulgee, Okla.—Publishing.—Okmulgee Democrat Publishing Co. incorporated with \$10,000 capital stock by J. J. Moroney, O. A. Lambert and A. R. Jennings.

Opp, Ala.—Mercantile.—People's Mercantile Co. incorporated with \$12,000 capital stock by L. J. Deal, T. J. Pierce, A. P. Stanley and C. W. Stanley.

Oriental, N. C.—Steamboat Line.—Oriental & Ocracoke Company incorporated with \$5000 capital stock by W. J. Smith, H. L. Gibbs and R. A. Dudley.

Parkersburg, W. Va.—Swan-Sanborn Co. incorporated with \$25,000 capital stock by E. W. Swan, J. W. Forshey, J. S. Echols and others.

Pensacola, Fla.—Steam Laundry.—Star Laundry Co. incorporated with \$10,000 capital stock; C. B. Manship, president; L. H. Roberts, vice-president; W. C. Roberts, secretary-treasurer.

Portsmouth, Va.—Incinerator.—Finance committee of City Council has recommended that city install Decarie incinerator to dispose of 25 tons of refuse daily; cost about \$21,000. Address The Mayor. (Recently mentioned.)

Ripley, Tenn.—Supplies.—Orysa Supply Co. incorporated with \$3000 capital stock by W. G. L. Rice, E. E. Foust, A. M. Estes and others.

Riverton, Ala.—Supplies.—J. L. Cary Supply Co. incorporated with \$5000 capital stock by J. L. Cary, E. Cary and J. N. Cary.

Roanoke Rapids, N. C.—Mercantile.—W. D. Bass Company incorporated with \$25,000 capital stock by W. D. Bass, Roanoke Rapids; S. D. Hancock, Winston-Salem, N. C., and W. T. Hancock, Scotland Neck, N. C.

Selma, Ala.—Jewelry and Optical Goods.—Schweizer Jewelry & Optical Co. incorporated by J. L. Schweizer, W. M. Vaughan and A. L. Schweizer.

South Coffeyville, Okla.—Grain Elevator.—Dicus Lumber & Grain Co., Kansas City, Mo., will establish grain elevator in South Coffeyville.

Statesville, N. C.—Mercantile.—Ramsey-Bowles-Morrison Co. incorporated with \$50,000 capital stock by M. E. Ramsey, F. Bowles, Herbert Morrison and others.

St. Louis, Mo.—Contracting.—Harvey-Burden Construction Co. incorporated with \$10,000 capital stock by George H. Harvey, Wm. A. Burden and Alexander Young.

000 capital stock by George H. Harvey, Wm. A. Burden and Alexander Young.

Tyler, Texas.—Steam Laundry.—American Laundry, recently noted incorporated, has installed machinery and will operate steam laundry; P. E. Williams, president; B. O. Lloyd, vice-president; T. C. Williams, secretary-treasurer.

Sulphur, Okla.—Hardware.—Frier Hardware Co. incorporated with \$10,000 capital stock by C. G. Frier, L. H. Frier and M. D. Frier.

Sumter, S. C.—Mercantile.—Cuttino & McKnight Company incorporated with \$3000 capital stock.

Taylor, Texas.—Steam Laundry.—Ivy Foster, Ada, Okla., will establish steam laundry; will erect structure 40x70 feet; corrugated iron.

Tulsa, Okla.—City will vote February 16 on \$25,000 bond issue for park improvements. Address The Mayor.

Washington, N. C.—Land Improvement.—Home Building & Realty Co., recently reported incorporated with \$125,000 capital stock, will build and sell houses and promote manufacturing enterprises; F. H. Short, president; W. L. Vaughn, secretary-treasurer; W. E. Jones, general manager, all of Washington, N. C.

Waynesville, N. C.—Mercantile.—Haywood Grocery Co. incorporated with \$25,000 capital stock by R. A. Mitchell, Van McClure and others.

Winchester, Tenn.—Nurseries.—Tennessee Wholesale Nurseries incorporated with \$60,000 capital stock by N. W. Hale, J. L. Deaven, H. N. Camp and others.

### MISCELLANEOUS MANUFACTURING PLANTS

Baltimore, Md.—Bottle Caps.—King Cork & Seal Co., 407 East Pratt St., has leased factory building at 600 Buren street and will equip for manufacture of bottle caps; C. C. Watts, 113 West Hamilton St., Baltimore, contractor. (Mentioned in November.)

Baltimore, Md.—Candy.—Lauer & Suter Co., 1420 Philpot St., awarded contract to M. Z. Hammen, 1825 McCulloh St., Baltimore, for erection of addition in rear of 1439 to 1447 Block street and adjoining present plant; four stories; 41x110 feet; concrete foundation; slag roof; steam heat; electric lights; cost about \$10,000.

Birmingham, Ala.—Ice Cream.—Reinhart Ice Cream Co. incorporated with \$10,000 capital stock by Oscar Reinhart, Mrs. Anna M. Reinhart and R. E. Smith.

Birmingham, Ala.—Neckwear.—A. B. Small Company, Macon, Ga., is not interested in establishment of neckwear manufacturing plant in Birmingham. (Recently incorrectly noted.)

Bogalusa, La.—Bottling.—Ozone Ice Co. proposes establishment of bottling plant in connection with ice plant.

Boyet, Fla.—Turpentine.—D. L. Thorpe, Townsend, Ga., has purchased 4000 acres of timber land near Boyett, and will establish turpentine farm; will expend about \$25,000.

Boxwood, Va.—Brooms.—Hill & Jones contemplate installing machinery to manufacture brooms. (See "Machinery Wanted.")

Bristol, Va.—Tenn.—Drugs.—Bristol Drug Manufacturing Co., previously reported incorporated, has organized with \$20,000 capital stock; D. L. Rankin, president; J. D. Thomas, first vice-president; W. R. Stover, second vice-president; W. W. Lockett, treasurer.

Chattanooga, Tenn.—Hats.—Knox-Thomas-Spears Company incorporated with \$125,000 capital stock by G. F. Thomas, E. L. and W. S. Knox and others; reorganization of Knox Bros. and Thomas Hat Manufactory.

Cherryville, N. C.—Vending Machines.—Universal Vending Machine Co. incorporated with \$30,000 capital stock to manufacture vending machine patented by J. B. Morrison.

Clifton Forge, Va.—Marble Works.—Clifton Forge Marble & Granite Works will, it is reported, enlarge plant.

Columbia, S. C.—Railroad Appliances.—Railroad Appliance Co. incorporated by Alexander Rowland, James B. Edwards and Lysander D. Childs, to manufacture patented railroad devices.

Cuthbert, Ga.—Fertilizer.—Home Mixture Guano Co., Columbus, Ga., contemplates establishment of fertilizer plant in Cuthbert.

Cuthbert, Ga.—Fertilizer.—Southern Cotton Oil Co., Augusta, Ga., awarded contract to W. T. Jay, Cuthbert, for erection of fertilizer plant in Cuthbert; establishment of cotton-oil mill also contemplated.

Delcambre, La.—Sugar.—Delcambre Sugar Co., Ltd., incorporated with Desre Delcam-

bre president, Emile Gajan vice-president, A. A. Delcambre secretary-treasurer, to establish sugar factory.

Fairview, N. C.—Tannery.—Charlotte Tannery Co. incorporated with \$125,000 capital stock; V. J. Guthrie, president and treasurer; J. H. Howell, vice-president; all of Charlotte, N. C.; purchased plant of Shaw Harness Co. at Fairview; will install new machinery and operate.

Fort Worth, Texas.—Cotton Collars.—Cotton Collar Co., recently reported incorporated with \$20,000 capital stock by W. D. Couch and others, will manufacture cotton-filled horse collars; has bought and remodeled building.

Gadsden, Ala.—Harness.—C. W. and J. R. Jones, Madison, Ga., will establish plant in Gadsden for manufacturing harness, bridles, etc.

Gainesville, Fla.—Paper Mills.—C. W. Chase and New England capitalists reported as planning construction of paper mill to cost \$2,000,000; to manufacture paper from stumps of dismantled pines. Boston engineers are said to have selected site for the plant.

Greensboro, N. C.—Planetarium.—L. J. Brandt, Guilford Hotel Bldg., is promoting organization of company to manufacture planetariums, an automatic device patented by N. W. Hurst, performing function of sun, earth and moon, designed to give practical instructions in geography and elementary astronomy.

Greenville, S. C.—Optical Goods.—Globe Optical Co. will increase capital stock from \$2000 to \$10,000.

Greenwood, S. C.—Marble Works.—Owens Bros. Marble Co. of Greenwood will establish plant recently mentioned; will manufacture marble and granite monuments, etc.; no machinery to be installed for several months. (See "Machinery Wanted.")

Kansas City, Mo.—Suspenders and Belts.—O. R. Rust, Springfield, Ohio, will, it is reported, establish plant in Kansas City for manufacturing suspenders and belts; cost \$25,000; space secured in Isaacs Building.

Lagrange, Ga.—Bottling.—Lagrange Pepsi-Cola Bottling Co. incorporated with \$5000 capital stock by O. F. Copeland, M. A. Copeland and A. B. Copeland.

Lynchburg, Va.—Motor Cars.—R. P. Apperson contemplates establishment of plant to manufacture motor cars.

Macon, Ga.—Leather.—Young Investment Co., Savannah, Ga., contemplates establishment of tannery and leather works in Macon.

Manchester, Va.—Distillery.—Zeb Austin Whiskey Co. incorporated with \$10,000 capital stock; W. J. McDaniel, president; R. Wakefield, vice-president and general manager, both of Manchester; Z. W. Austin, secretary and treasurer, Salisbury, N. C.

Memphis, Tenn.—Snuff.—American Snuff Co., main office, New York, awarded contract to Acme Construction Co., Cincinnati, Ohio, for erection of plant; reinforced concrete; fireproof throughout; four stories and basement; 160x55.8 feet; cost, including equipment, about \$75,000; company reported to erect number of smaller buildings, to cost \$20,000; later will probably establish box and tin-can factory. (This supercedes recent report.)

Middlesboro, Ky.—Mattresses.—Norton Mattress & Manufacturing Co., Norton, Va., contemplates establishment of plant in Middlesboro.

Mt. Carmel, Ky.—Creamery.—Sugar-Loaf Creamery Co., recently reported incorporated (under Flemingsburg, Ky.), will continue operation of creamery with capacity of 5000 pounds of milk daily; C. E. Shekell, president; W. L. Clark, secretary and treasurer.

New Orleans, La.—Picture Films.—J. E. Pearce & Sons will establish plant for manufacturing moving-picture films.

New Orleans, La.—Wearing Apparel.—H. L. Nick Manufacturing Co. incorporated with \$25,000 capital stock; Henry L. Nick, president; Isadore Alaynick, vice-president; Israel B. Rau, secretary and treasurer.

New Orleans, La.—Wall Board and Roofing.—Mastic Wall Board & Roofing Manufacturing Co., Ltd., contemplates increasing capital stock to \$100,000.

Norfolk, Va.—Railway Appliance.—Company is being organized to establish plant in Norfolk to manufacture railway appliance invented by Samuel W. Clark, Durham, N. C., to bring locomotives and trains to a sudden stop when for any reason signals on the line have been disregarded. (See "Machinery Wanted.")

Oklahoma City, Okla.—Gas and Electrical Supplies.—Arnold & Weatherbee, Ltd., incorporated with \$50,000 capital stock by W. H. Weatherbee, Gunnell Moore and F. W. Van Ness.

Oklmulgee, Okla.—Oil Refinery.—Oklmulgee Oil Refinery will increase capacity from 250 to 900 barrels daily and install wax plant; also plans to construct pipe line to oil produced in vicinity and supply local refinery with oil; also install loading racks and ship oil to Gulf Coast points.

Phillippi, W. Va.—Suspenders.—Peerless Suspenders Manufacturing Co. incorporated with \$25,000 capital stock by E. K. Dyer, R. J. Dunham, J. E. Strader and others.

Reidsville, N. C.—Vending Machines.—Universal Vending Machine Co., Jno. C. Morrison, acting secretary, recently reported incorporated, will manufacture machine to vend articles from postage stamp to various-sized packages. (See "Machinery, etc., Wanted.")

St. Louis, Mo.—Electrical Devices.—St. Louis Storage Battery Co., 2107 Pine St., capitalized at \$200,000, will manufacture patented storage battery and other electrical devices; building is leased and machinery contracted for; Geo. S. Tourville, president-treasurer; Wm. Gardner, vice-president; Oscar A. Morgner, secretary; John Stirlen, general manager. (See "Machinery, etc., Wanted.")

St. Louis, Mo.—Clothing.—Schwab Clothing Co. has leased five-story fireproof structure, containing 40,000 square feet of floor space, and will expend \$100,000 to establish plant in order to increase capacity of present plant.

St. Louis, Mo.—Candy.—J. C. Goodyear Candy Co. incorporated with \$10,000 capital stock by Katherine Goodyear, Arthur M. Goodyear and Adolph E. Methudy.

St. Louis, Mo.—Bottles.—Pyraform Bottle Manufacturing Co. incorporated with \$100,000 capital stock by Wm. L. Poffenberger, Arthur C. Dingelstedt, Clarence C. Proctor and others.

St. Louis, Mo.—Umbrellas.—Umbrella Renting Co. incorporated with \$50,000 capital stock by Emmitt McGinn, Victor Gillam, Charles Summers and James Haley.

St. Louis, Mo.—Wearing Apparel.—N. Friedman & Sons Cloak Co. incorporated with Nathan Friedman, Henry A. Friedman and Robert V. Friedman.

St. Louis, Mo.—Bakery.—St. Louis Pretzel & Baking Co. incorporated with \$40,000 capital stock by George B. Johnston, William Brown, G. Lacy Crawford and others.

St. Louis, Mo.—Wearing Apparel.—Well-Kalter Manufacturing Co. incorporated with \$50,000 capital stock by Maurice Well and Leo S. Kalter.

St. Petersburg, Fla.—Gas Plant.—Citizens' Natural Gas Co., Ocala, Fla., contemplates establishment of gas plant in St. Petersburg to cost about \$50,000.

Tampa, Fla.—Builders' Supplies.—Tampa Builders' Supply Co. incorporated with \$25,000 capital stock; W. W. Holsinger, president; W. C. Bigger, vice-president; L. H. Strum, secretary; S. S. Cralle, treasurer and general manager.

Tulsa, Okla.—Refinery.—Tulsa Refining Co., 223 Reeder Bldg., will erect 1000-barrel coal-oil tank, 500 gasoline tank and 20,000 crude-oil tank; plant has daily capacity of 250 barrels; John O. Mitchell, president; W. F. Ewing, secretary and treasurer. (Mr. Mitchell recently noted purchasing control of Webster refinery.)

Waycross, Ga.—Cigars.—Pittman Cigar Manufacturing Co., organized by A. R. Pittman, will establish plant in Walker Building for manufacturing cigars.

Westpoint, Ga.—Fertilizer.—Home Mixture Guano Co., Columbus, Ga., will establish fertilizer plant in Westpoint.

Wheeling, W. Va.—Novelties.—Haskins-Rex Manufacturing Co. incorporated with \$15,000 capital stock by Thomas M. Haskins, L. E. Rex, Louis A. Serig and others.

Winston-Salem, N. C.—Collapsible Bookcase.—Company is being organized to establish plant for manufacture collapsible bookcase invented by J. H. Scott.

Youngsville, La.—Sugar.—C. L. Lasalle, New Iberia, La., is promoting establishment of sugar factory at or near Youngsville.

## RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Ablene, Texas.—Ablene & Southern Railway Co., Percy Jones of Abilene, chief engineer, will, it is reported, erect roundhouse at Abilene; surveys are being made.

Eldorado Springs, Mo.—Eldorado Springs, Tiffin, Monogaw Springs & Lowry City Railroad Co., C. A. Edgar of Eldorado Springs, president, will build repair shops in Eldorado Springs.

Fort Worth, Texas.—St. Louis Southwestern Railway, J. W. Maxwell, general super-

intendent, Tyler, Texas, is having preliminary surveys made, it is reported, for proposed terminals and depot; bridge will also be constructed across Trinity River; expenditure about \$500,000.

Lafayette, La.—Southern Pacific Company, A. V. Kellogg, engineer maintenance of way, Houston, Texas, has purchased 200 acres of land near Lafayette and will, it is reported, construct repair shops.

Macon, Ga.—J. F. Hanson, Atlanta, Ga., president Central of Georgia Railway, has authorized that work proceed on construction of engine terminal at Macon; it is understood that cement sewers will be built in connection; original appropriation for improvements was \$1,000,000; about one-half of betterments contemplated are said to be completed at cost of approximately \$750,000, and it is reported that cost of new shop extensions will exceed \$250,000. (Recently referred to.)

New Orleans, La.—Reports are current that Illinois Central Railway, A. S. Baldwin, chief engineer, Chicago, Ill., will soon begin construction of inbound and outbound freight sheds on property recently purchased by Yazoo & Mississippi Valley Railroad; reports state buildings will be of brick and stone, costing several million dollars, and replace Illinois Central sheds and terminals on levee front. J. T. Harahan, Chicago, president of Illinois Central, telegraphs Manufacturers' Record that these reports are in error.

## ROAD AND STREET IMPROVEMENTS

Anniston, Ala.—City awarded contract to E. J. O'Brien of Anniston for building boulevard from Edgemont Cemetery to city limits of Oxford; boulevard to be 60 feet wide; 30 feet will be macadamized at once.

Augusta, Ga.—Augusta-Alken Highway Association, J. C. Lamar, president, will begin at once, it is reported, construction of proposed cement-gravel road between Augusta and Aiken, S. C.; about five miles of new road between Belvedere and Langley, S. C. will be built.

Baltimore, Md.—Park Board, Ferdinand C. Latrobe, president (office, Druid Hill Park), will expend \$9000 to complete paving of the mall at Patterson Park. (See "Electric-light and Power Plants.")

Birmingham, Ala.—City will pave certain sidewalks; bids opened January 20; specifications may be obtained and plans examined at office of Maury Nicholson, City Engineer.

Charlotte Court House, Va.—Charlotte county has voted \$100,000 bond issue for road improvements; this, with amount already given by State, will total about \$165,000 to be expended on roads. Address County Commissioners. (Recently mentioned.)

Cookeville, Tenn.—Putnam county has called off election for issuance of \$100,000 of bonds for road construction recently mentioned; improvements will not be made.

Dallas, Texas.—City is about to invite bids for paving of North Ervay street; specifications call for various asphalt surfacing, bitulithic surface on concrete and on bituminous base, vitrified brick and block on concrete, cressoted blocks on concrete and petrolithic; J. M. Preston, City Engineer.

Decaturville, Tenn.—Decatur county granted 20-year franchise to L. H. Burke, Parsons, Tenn., for turnpike road between Decaturville and Parsons, distance of five miles.

Denton, Md.—Caroline county will improve road between Federalburg and Reliance; work includes grading and macadamizing of about 1 1/4 miles; contract will soon be awarded; I. L. Dukes, clerk to County Commissioners.

Elgin, Texas.—City will grade streets; plans not made; A. H. Davis, Mayor.

Fort Pierce, Fla.—St. Lucie county postponed date of election for voting on issuance of \$150,000 of bonds for road construction from January 19 to April 20. (Mentioned in November.)

Gadsden, Ala.—City awarded contract to Charles O. Duncan of Gadsden for construction of 5000 square yards of cement sidewalks at 85 cents per yard, and 150 square yards driveway at \$1 per yard, on 11th, 12th, Chestnut and Bay streets.

Green Cove Springs, Fla.—Clay county will vote February 16 on issuance of \$75,000 of bonds for construction of paved, macadamized or other hard-surfaced roads, together with necessary culverts and bridges; propose to build road which will connect with Duval county road on north and Putnam county road on south, forming continuous thoroughfare from Jacksonville to Palatka, Fla.; Duval county has awarded contract for fur-

nishing material for extending New York avenue to Clay county line, distance of three and one-half miles; Putnam county was previously reported as having voted \$100,000 of road bonds. Address Clay County Commissioners at Green Cove Springs; M. W. Griffin, clerk.

Greeneville, Tenn.—City rescinded action calling for election on January 9 to vote \$25,000 of bonds for street improvements. Address The Mayor. (Recently mentioned.)

Harrisonburg, La.—N. R. Cotton, president of Police Jury, has been authorized to invite bids for building five miles of road from Trinity on Harrisonburg road.

Jacksonville, Fla.—Duval County Commissioners have opened bids for constructing cement road from Enterprise street to Highway section; M. R. Garretson (probably of Jacksonville) is lowest bidder at 8 1/2 cents per square yard.

Jacksonville, Fla.—Duval county has awarded contract for furnishing material for proposed extension of New York avenue to Clay county line, distance of about three and one-half miles. Address County Commissioners. (See "Green Cove Springs, Fla.")

Jonesboro, Tenn.—Washington county will vote March 13 on issuance of \$150,000 of bonds for road improvements. Address County Commissioners.

Opelousas, La.—City will construct about 25,000 square feet of cement sidewalks and 7000 linear feet brick curbing; bids to be opened January 27; M. Halphen, Mayor. (See "Machinery Wanted.")

Salisbury, N. C.—City will macadamize several blocks on streets leading to principal country roads. Address The Mayor.

San Marcos, Texas.—City will vote on issuance of \$5000 of bonds for street improvements. Address The Mayor.

Selma, Ala.—City awarded contracts for paving recently mentioned; for brick paving of Broad and Water streets, to Crockett Paving Co.; asphalt paving on Broad street, to Memphis Asphalt & Paving Co., Memphis, Tenn.; contract price, \$84,500; contemplate beginning work within 30 days; V. B. Atkins, Mayor.

St. Louis, Mo.—Board of Public Improvements has approved expenditure of \$64,000 for improving 21 alleys and \$92,000 for improving 9 streets, including Burd, Easton, Michigan avenues, etc.; asphalt, bitulithic and granite will be used; contracts will be awarded January 29. Contracts for paving Minerva, Iowa, Marcus and Paris avenues with asphalt, brick and bitulithic will be awarded February 5; expenditure estimated at \$122,285. Ordinances calling for paving of Manchester avenue, 19th, Catalpa, Bates and Cooper streets with granite, brick and asphalt were submitted to the board.

Tryon, N. C.—Highway Commission (C. M. Howes, B. L. Ballenger and others) has completed road from Tryon to Lynn, N. C., and expects in spring to continue the road to Columbus, N. C.; \$12,000 of bonds have been issued, two-thirds of which has already been expended.

## SEWER CONSTRUCTION

Atlanta, Ga.—City will vote in March on issuance of \$1,000,000 of bonds for sewer construction. Address Mayor Maddox.

Baltimore, Md.—Bids will be opened February 3 for constructing water tanks and tower at sewage-disposal works on Back River; Peter Leary, Jr., chairman of Sewerage Commission. (See "Sewer Work" in "Machinery, etc. Wanted.")

Baltimore, Md.—Calvin W. Hendrick, chief engineer of Sewer Commission, has prepared plans for construction of first laterals in connection with sanitary sewer system, except those in Walbrook; these laterals will be parallel to outfall sewer in Northeast Baltimore and will cost about \$100,000; they will be built to curb line and not continued to building line until disposal plant and pumping station are completed and in operation; city will be divided into about 50 districts. (Previously mentioned.)

Baltimore, Md.—Sewerage Commission, Calvin W. Hendrick, chief engineer, City Hall, has approved specifications for furnishing tanks at disposal plant on Back River; estimated to cost \$10,000.

Baltimore, Md.—Board of Public Improvements will be asked to approve ordinance providing for construction of storm-water drain on Eastern avenue, from Lakewood avenue to present eastern city limits; estimated cost, \$15,000; work will probably be done by department of B. T. Fendall, City Engineer.

Bryan, Texas.—City will vote on issuance of \$75,000 of bonds for construction of sewer system, water-works and electric-light plant.

J. T. Maloney, Mayor. (Recently mentioned.)

Clearwater, Fla.—City will have plans and specifications ready about February 1 for construction of sewer and water systems recently mentioned; \$15,000 voted; H. W. Bivins, chairman. J. A. Holmboe, Louisville, Ky., has been employed as City Engineer and will have charge of construction.

Fort Worth, Texas.—City has engaged John Mead, City Engineer, 2317 Lincoln Ave., North Fort Worth, to prepare plans and specifications for sewer system; Mr. Mead will also supervise construction; (\$50,000 bond issue recently reported voted.)

Galveston, Texas.—City awarded contract to Heffron & Failliant of Galveston at about \$37,500 for construction of reinforced concrete drain on Avenue M. A. T. Dickey, City Engineer. (Recently mentioned.)

Galveston, Texas.—Heffron & Failliant of Galveston are lowest bidders for extension of Tremont-street sewer. Specifications called for eight items, as follows: 496 feet of 18-inch pipe; 390 feet of 8-inch pipe; 836 feet of 2x10-inch by 16-foot running board; 12-inch Y branch T corner; construction of six corner catch-basins; six side catch-basins; 18-inch manhole; 8-inch manhole. A. T. Dickey, City Engineer.

Graymont, P. O. Birmingham, Ala.—City will vote February 15 on issuance of \$10,000 of bonds for extending sanitary sewer system. W. A. Lester, Mayor.

Hartshorne, Okla.—City voted \$25,000 of bonds for sewer construction; W. E. Robbins, secretary.

Hobart, Okla.—City awarded contract to T. C. Brooks & Son, Jackson, Mich., for extension of sanitary sewer system; cost about \$25,000.

Longview, Texas.—Longview Sanitary Co., recently reported incorporated, etc., will begin construction of sewer system for city about February 1. Jas. M. Walker is president and general manager; Thos. McTyeire, vice-president, and E. M. Thomas, secretary-treasurer. (See "Machinery Wanted.")

Norfolk, Va.—Board of Control has asked that improvements be made to sewer pumping station in Sixth ward and recommended to Council that \$16,000 be appropriated for purchase of pump, boiler and erection of brick plant. W. T. Brooke, City Engineer, has recommended purchase of 12-inch centrifugal pump, with capacity of 5000 gallons per minute; 100-horse-power boiler to provide steam, and erection of brick building to replace present structure on Colley avenue.

Vicksburg, Miss.—City will construct storm sewer on Clay street; bids to be opened February 1. J. J. Hayes, Mayor. (See "Machinery Wanted.")

## TELEPHONE SYSTEMS

Bowling Green, Va.—Caroline County Telephone Co. has increased capital stock from \$10,000 to \$15,000.

Darlington, S. C.—Mechanicsville Telephone Co. incorporated.

Front Royal, Va.—Liberty Corner Mutual Telephone Co. incorporated with \$5000 capital stock; R. J. Stokes, president; John Derlinger, vice-president; C. E. Brown, secretary and treasurer.

Geary, Okla.—Alfalfa Telephone Co. incorporated by A. B. Campbell, Otto Pallas and T. P. Quayle.

Keystone, Okla.—Keystone Telephone Co. incorporated by S. N. Albury, C. O. Reynolds, A. J. Snow and P. E. Long.

Lexington, S. C.—Hollow Creek Telephone Co. is name of company recently noted organized with Haskell Shull president, to construct rural telephone line; will connect with main line; cost \$500 to \$600; G. C. Price, engineer in charge; Mr. Shull's address, R. F. D. 3, Gilbert, S. C.

Marathon, Texas.—Marathon Telephone Co., J. G. Reisinger, president, recently reported incorporated, has established and will operate telephone exchange.

Trimble, Tenn.—Trimble Telephone Co. incorporated by B. V. Thomas, J. M. McKennon, T. A. Pierce and others.

## TEXTILE MILLS

Acworth, Ga.—Cotton Rope.—Board of Trade is planning establishment of cotton-rope mill.

Acworth, Ga.—Knit Goods.—Board of Trade is planning establishment of knitting mill.

Cornelius, N. C.—Finishing Plant.—Cornelius Cotton Mills reported as to install finishing plant.

Denison, Texas.—Cotton Cloth.—Denison Cotton Mill Co. has ordered 96 looms, additional to present equipment.



Duke, N. C.—Cotton Goods.—W. A. Erwin, treasurer of Erwin Cotton Mills Co., West Durham, N. C., telegraphs the Manufacturers' Record relative to report that he has begun construction of 50,000-spindle mill at Duke. He says: "Our directors have taken no action looking to the construction of the new mill; reports, therefore, to the contrary are premature."

Houston, Texas.—Camel's-hair Cloth.—Oriental Textile Mill has increased capital stock from \$100,000 to \$300,000; manufactures camel's-hair cloth.

Lancaster, S. C.—Leroy Springs, president of Lancaster Cotton Mills, Lancaster; Eureka Cotton Mills and Springstein Mills, Chester, S. C., awarded contract to Westinghouse Electric & Manufacturing Co., Pittsburgh, Pa., for installation of equipment for electrical drive. (Previously mentioned.)

Laurinburg, N. C.—Cotton Yarns.—Waverly Cotton Mill incorporated with capital stock of \$300,000 by J. P. McRae and others; to build mill lately reported; will equip with 15,000 spindles; contract for machinery awarded to Mason Machine Works, Taunton, Mass.; Kitson Machine Shops, Lowell, Mass., and others.

Lebanon, Tenn.—Woolen Blankets.—Lebanon Woolen Mills reported incorporated lately with \$60,000 capital stock, organized with H. K. Edgerton president and H. M. Freeman manager; will erect building and install either two or three-set mill for manufacturing woolen blankets; will use either electric, steam, or gas-producer plant for power; no machinery purchased and correspondence is invited. (See "Machinery Wanted.")

Mount Holly, N. C.—Yarns.—Woodlawn Manufacturing Co. will erect one-story 75x100-foot addition; has begun construction; will add new machinery; present equipment, 5120 ring spindles operated by electricity.

Slocumb, Ala.—Cotton Yarns.—A company will be organized with capital stock of \$100,000 to build cotton mill. G. H. Malone is probably interested.

Zebulon, N. C.—Yarns.—Southern Spinning & Manufacturing Co. incorporated with capital stock of \$300,000 by T. J. Horton, Z. M. Caviness and others.

### WATER-WORKS

Atlanta, Ga.—City will vote in March on issuance of \$500,000 of water-works bonds. Address Mayor Maddox.

Auburn, Ala.—City has voted \$12,000 bond issue for extension of water-works. Address The Mayor.

Bryan, Texas.—City will vote on issuance of \$75,000 of bonds for construction of water-works, sewer system and light plant. J. T. Maloney, Mayor. (Recently mentioned.)

Clearwater, Fla.—City will have plans and specifications ready about February 1 for construction of water and sewer systems recently mentioned; \$15,000 voted; H. W. Bivins, chairman; J. A. Holmboe of Louisville, Ky., has been employed as City Engineer and will superintend construction.

Clinton, Okla.—City awarded contract to G. C. Brooks & Sons, Jackson, Mich., for extending distributing system of water-works about 40 blocks; S. J. Storm, Town Clerk. (Recently mentioned.)

Fairmont, W. Va.—Hampshire Orchard Co., Wm. B. Cornwall, president, will install complete system water-works; construction begun.

El Dorado, Ark.—El Dorado Light & Water Co., J. P. Holmes, president, recently reported incorporated, will install about four miles of mains, from 4 to 10-inch; 50 fire hydrants for 2½-inch hose, 3 connections; deep well, and 100-gallon cylindrical-bottom steel tank on 100-foot steel tower; contract for laying pipe to be let about February 1. (See "Machinery Wanted.")

Elgin, Texas.—City will vote January 26 on issuance of \$30,000 of bonds for construction of water-works; if election carries, engineer will be employed to prepare plans; A. H. Davis, Mayor.

Erick, Okla.—City voted \$27,500 of bonds for water-works; A. G. Gillum, Mayor.

Follansbee, W. Va.—Organization of water company is being considered; will be granted 10-year franchise. Address The Mayor.

Gainesville, Ga.—City is considering arrangements for increasing water supply; committee recommends that dam and lake reservoir be built below present station, and pump with capacity of 60,000 gallons per hour be installed. Address The Mayor.

Greenville, Tenn.—City has revoked action calling for election of January 9 to vote \$15,000 of water bonds. Address The Mayor.

Hartshorne, Okla.—City voted \$30,000 bond issue for water-works; W. E. Robbins, secretary.

Hugo, Okla.—City will open bids February 2 for furnishing material, tools and labor for construction of water-works plant; Hiram Phillips, St. Louis, Mo., consulting engineer, has prepared plans and specifications; \$150,000 of bonds voted; W. L. Gibbs, acting Mayor. (See "Machinery Wanted.")

Humble, Texas.—County Commissioners granted franchise to F. A. Peters to construct and operate water-works; reported that franchise will be transferred to Humble Water, Light & Ice Co. and that company will operate system over territory of about 36 square miles.

Jellico, Tenn.—Plans made by J. B. McCrary & Co., Atlanta, Ga., for gravity system water-works, recently noted, call for laying of six-inch cast-iron pipe line to supply source five miles distant; to deliver 225 gallons per minute into concrete reservoir; ownership of system not yet decided.

Kaufman, Texas.—City will extend water mains, install water-wheel, lay pipe, etc.; work to be done in June; \$6000 bond issue recently noted. E. E. Thompson, Mayor. (See "Machinery Wanted.")

Richmond, Va.—Council committee on water decided to advertise for bids for construction of flume from settling basin to pump-house, each bidder to furnish plans and specifications; proposals to be opened in 10 days and be for both metal and concrete construction. Charles E. Bolling, City Engineer. (Further facts recently mentioned.)

Royston, Ga.—Mr. Cook, representing J. B. McCrary & Co., engineers, Atlanta, Ga., submitted to city authorities a bid for maps, plans and specifications for water-works system; bond election may be called. Address The Mayor.

Seabree, Ky.—City is considering construction of water-works; City Clerk is securing estimates of cost. Address The Mayor.

St. Louis, Mo.—Board of Public Improvements has approved expenditure of \$210,000 for extension of water mains; \$55,000 to be expended for laying the mains and \$155,000 for material.

Tulsa, Okla.—City will vote February 16 on issuance of \$30,000 of bonds for improvements to water plant. (City recently mentioned to install pump of 3,000,000 or 4,000,000 gallons capacity at water plant and as having awarded contract to Swift & Alt, St. Louis, Mo., at \$27,000 for construction of sedimentation basins.) T. C. Hughes, engineer; W. E. Rhode, Mayor.

Williamson, W. Va.—Norfolk & Western Railway, C. S. Churchill, chief engineer, Roanoke, Va., is building with company's forces new pumping plant at Williamson.

### WOODWORKING PLANTS

Birmingham, Ala.—Carriages.—Taylor Carriage Co. incorporated with \$25,000 capital stock; E. D. Taylor, president; A. B. Lovelace, vice-president and treasurer; H. W. Nash, secretary.

Birmingham, Ala.—Carriages.—Taylor Carriage Co. incorporated with \$25,000 capital stock by E. D. Taylor, A. B. Lovelace and H. W. Nash.

Columbus, Ga.—Showcases and Office Fixtures.—National Showcase Co. incorporated with \$50,000 capital stock; James A. Lewis, president; J. Homer Dimon, secretary-treasurer and general manager; W. C. Dolcater, general superintendent; will take over plant of Columbus Furniture & Fixture Co., add new equipment and manufacture showcases and office fixtures. (Recently mentioned.)

Crossville, Tenn.—Caskets.—Crossville Casket Co. organized by John Hembree and Ed Hembree.

Crowley, La.—Sash, Doors and Blinds.—Jens Nelson has secured machinery and equipment of old Eckhardt Manufacturing Co. and will install same in building 36x50 feet, where he will establish sash, door and blind factory.

Dallas, Texas.—Woodenware.—Miller-Wagstaff Woodenware Co. has increased capital stock from \$20,000 to \$30,000.

Dunn, N. C.—Furniture.—Newberry Bros. & Cowell will install machinery for manufacturing furniture.

Earl, Ark.—Veneer, Tubs and Trays.—Dunbar Scott, North Manchester, Ind., proposes establishment of plant in Earl for manufacturing veneer and lard and butter tubs and trays.

Frederick, Md.—Silos, Tanks, Buckets, etc. Economy Silo & Manufacturing Co. incorporated with \$24,000 capital stock by Peter Hargett, J. Franklin Thomas, Thomas H. Haller and others.

Greenwood, Miss.—Furniture.—Tallahatchie Furniture Manufacturing Co. incorporated with \$50,000 capital stock by M. F. C. Hum-

phrey, E. Gid Montjoy, Jr., E. L. Mounger and others.

High Point, N. C.—Chairs.—Tomlinson Chair Manufacturing Co. will erect addition; two stories; brick.

Huntingdon, Tenn.—Box Factory, etc.—Huntingdon Wood Manufacturing Co., J. H. McCall, president, recently elected officers at annual meeting; operates box factory and lumber business. (Lately incorrectly noted.)

Kansas City, Mo.—Wagons.—Hogland Wagon Co. incorporated with \$75,000 capital stock by John Hogland, Fred J. Hogland, Victor E. Hogland and others.

Lenoir, N. C.—Furniture.—Caldwell Furniture Co. incorporated with \$50,000 capital stock by O. P. Lutz, J. P. Rabb, H. T. Newland and others.

Lenoir, N. C.—Chairs.—Lenoir Chair Co. will double equipment of plant, which will nearly quadruple output or increase it to 900 or 1000 dozen chairs daily.

Martinsville, Va.—Spokes and Handles.—Virginia Spoke & Handle Co. will rebuild plant previously reported burned at loss of \$14,000.

Oklahoma City, Okla.—Furniture.—Tucker, Hanks & Daughill Furniture Co. incorporated with \$25,000 capital stock by C. Sid Tucker, W. U. Daughill and F. G. Hanks.

Roanoke, Va.—Barrels, etc.—Roanoke Co-operative Co. incorporated with \$50,000 capital stock; D. A. Nicholson, Ferrum, Va., president; N. S. Goode, Henry, Va., vice-president; C. K. Lemon, Roanoke, secretary-treasurer and general manager; will erect 50x70-foot temporary building; frame; sheet-iron roof; cost \$1000; daily capacity 14,000 27½-inch slack staves and 2000 sets heading; no machinery needed.

South Coffeyville, Okla.—Sash.—J. R. Williams, Fulton, Okla., and F. H. Milerson, Parsons, Okla., will establish plant in South Coffeyville for manufacturing sash; will erect building.

Winnfield, La.—Sash, Doors and Blinds.—W. H. Baker will establish plant for manufacturing sash, doors and blinds; will erect building; construction has begun.

### BURNED

Arlington, Texas.—North Side Public School building; loss about \$15,000. Address The Mayor.

Bartow, Fla.—South Florida Marble Works' plant; building owned by E. A. Law; loss about \$4500.

Blakely, Ga.—John Strickland's store; J. W. Williams' store; both buildings owned by G. E. Chipstead.

Breaux Bridge, La.—Domingaux Hotel, conducted by Numa Cormier; loss \$3000.

Bryan, Texas.—Perkins Building, owned by F. D. Perkins, McKinney, Texas, and occupied by First National Bank; Bryan Evening Pilot (newspaper), owned by A. J. Buchanan, John M. Lawrence & Co., and others; loss on building, \$25,000.

Buena Vista, Va.—Buena Vista Mills' feed mill.

Centreville, Ala.—Suttle & Weaver Land & Lumber Co.'s sawmill; loss several thousand dollars.

Chattanooga, Tenn.—Cliffs Hotel on Walden's Ridge.

Dallas, Texas.—A. P. Tenison's residence; loss about \$10,000.

Dublin, Texas.—Texas Central Railroad Co.'s freight depot; estimated damage, \$15,000; H. S. McCall, Waco, Texas, is resident engineer.

Durham, N. C.—Municipal building, containing Academy of Music, market-house and city offices; loss about \$50,000. Address The Mayor.

El Paso, Texas.—D. M. Payne & Co.'s commission-house; loss about \$15,000.

El Paso, Texas.—D. M. Payne's commission house; loss about \$14,000.

Gilmer, Texas.—School building; loss about \$4000. Address The Mayor.

Greenville, Mo.—Greenville Veneering Co.'s barrel and crate departments and power plant; loss about \$10,000.

Hampton, Va.—J. H. Adams' residence; loss about \$5000.

Harper's Ferry, W. Va.—Jefferson Brewing Co.'s plant; loss about \$10,000.

Holland, Texas.—Building occupied by J. M. Thompson as hotel; loss \$4000.

Jackson, Miss.—Clarke Memorial College's dormitory; loss about \$8000.

Macon, Miss.—Macon Hotel; loss \$20,000.

Mammoth Spring, Ark.—Mammoth Spring electric-light and power plant, owned by C. McArcher of Mammoth Spring and Napoleon

Hill, Memphis, Tenn.; estimated loss, \$3000. Memphis, Tenn.—Demarchi Macaroni Co.'s plant; loss about \$10,000.

Oil City, La.—Oil City Hotel, owned by Henry Marks, loss about \$5000; Stag Hotel, building owned by J. S. Savage, loss about \$5200; Selz & Forney's building, loss about \$2500; J. K. Norman's hotel and postoffice. Raleigh, N. C.—Odd Fellows' Orphanage's main dormitory buildings; loss about \$40,000.

Rome, Ga.—Lindsey & Hick's livery stable, loss about \$15,000; Third Avenue Hotel, loss about \$8000; Wilkerson Block, owned by heirs of I. T. Wilkerson, loss about \$12,000; Rome Publishing Co.'s plant, loss about \$20,000.

San Marcos, Texas.—Mecham Bros.' bakery and confectionery store; Ward Malone's cold-storage plant; both buildings owned by Mr. Malone; loss about \$17,000.

Spring Hill, Ala.—Spring Hill College; loss about \$250,000.

Strangecreek, W. Va.—Meade & Sperry's lumber plant; loss about \$100,000.

Swan Creek, not a postoffice, Md.—Swanbury Mill at Swan Creek; owned by Baugher & Raines, Havre de Grace, Md.

Terrell, Texas.—American Hotel, John Skaggs, manager, Dallas, Texas; Monroe Charles' livery stable; both buildings owned by Mrs. L. A. Johnson; loss about \$50,000.

Trinity, Texas.—John F. Stanley's cotton gin; loss about \$4500.

Villa Platte, La.—Corell & Octego's mercantile store; loss about \$14,000.

## BUILDING NOTES

### APARTMENT-HOUSES

Birmingham, Ala.—E. C. Bowman contemplates erection of apartment-house on Highland avenue; plans are being prepared by Hook & Rogers, Charlotte, N. C.; probably five-story reinforced concrete structure will be built; details not ready for announcement.

Chattanooga, Tenn.—N. H. Grady, care of Glover & Grady, East 8th St. and Georgia Ave., will remodel two dwellings on West 7th street, converting them into two-story brick apartment-house; slate roof; hard pine interior finish; brick mantels; plumbing; electric and gas lighting; four apartments, five rooms each; plans by W. T. Downing, James Bldg., Chattanooga.

Chattanooga, Tenn.—T. H. McCallie (address Rev. T. H. McCallie, Ridge St., East Lake, Tenn.) awarded contract to George Lerch, R. F. D. No. 1, Highland Park Station, Chattanooga, for erection of \$6000 20-room apartment-house on East 8th street; two stories; brick; composition or slate roof; 60x64 feet; concrete footings and walks; hard pine interior finish; cabinet mantels; electric and gas lighting; plumbing; plans by H. D. Breeding, Birmingham, Ala.

Lynchburg, Va.—A Lee Beasley awarded contract to C. W. Hancock & Sons of Lynchburg for erection of Courtland apartment building; 7 stories; 48x127 feet; brick and terra-cotta; ordinary construction; low-pressure steam heat; electric elevators; estimated cost \$75,000; plans by Aubrey Chesterman of Lynchburg. (Noted in October.)

Nashville, Tenn.—C. K. Colley, Chamber of Commerce Bldg., Nashville, is preparing plans for apartment-house to be erected by himself; structure to be of brick and Bowling Green stone; frontage, 150 feet; three stories; contain six three-room, six four-room and six six-room apartments; furnished in hardwood, including floors; bathrooms to be tiled; low-pressure steam heat; cost \$30,000.

Nashville, Tenn.—Alexander Weinbaum has begun construction of proposed apartment-house; three stories; Bowling Green stone and red pressed brick; buff brick trimmings; elevated slate roof; hardwood finish throughout, including floors; contain 12 five-room apartments. Plans by C. K. Colley, Chamber of Commerce Bldg., Nashville.

Richmond, Va.—E. R. Fuller will erect apartment-house to cost \$12,000.

St. Louis, Mo.—John Gysbers, Jr., purchased site 30x125 feet, on which to erect apartment-house costing \$5000.

Tampa, Fla.—Fred Bize will erect apartment-house to contain four five-room flats; cost \$6500; plans by A. H. Johnson, Madison and Tampa Sts., Tampa, who will supervise construction.

Tampa, Fla.—Mrs. Therese Tinney has had plans prepared by A. H. Johnson, Madison and Tampa Sts., Tampa, for double five-room apartment-house, to cost \$3000; Mr. Johnson will supervise construction.

**BANK AND OFFICE BUILDINGS**

Barbourville, Ky.—Nimrod Lunsford, W. H. Detherage and John Lawson will erect four-story brick building, to contain business rooms, theater and office rooms; cost \$40,000; plans by Architect Graf, Knoxville, Tenn.; no contracts awarded.

Bryan, Texas—Business Building.—F. D. Perkins, McKinney, Texas, will erect three-story brick business building to replace structure reported burned.

Cape Charles, Va.—New York, Philadelphia & Norfolk Railroad Co., J. G. Rodgers, superintendent, Cape Charles, contemplates, it is reported, improvements to superintendent's office building.

Covington, Va.—Citizens' National Bank will erect bank building.

Elizabeth City, N. C.—First National Bank will remodel bank building.

Kansas City, Mo.—Gloyd Lumber Co. has changed plans and will erect 10-story office building instead of eight-story structure originally proposed.

Kings Mountain, N. C.—First National Bank will have plans prepared for bank building.

Little Rock, Ark.—J. M. Whitehead of Little Rock is preparing plans for repairing burned Board of Trade building; expenditure \$20,000. (Recently noted.)

Nashville, Tenn.—Union Bank & Trust Co. has submitted plans and specifications to contractors, inviting bids for erection of bank and office building; five stories; 45x59 feet; fireproof; basement will contain storage and book vaults, heating and lighting equipment, etc.; safety-deposit and tellers' vaults for bank will be protected by electric burglar alarm system; bank will occupy basement, first and mezzanine floors; three upper floors to be divided into office suites; estimated cost, \$150,000; Mowbray & Uffinger, 92 Liberty St., New York, are architects. (Recently mentioned.)

New Orleans, La.—Kennedy & Adkins, Cincinnati, Ohio, have completed amended plans for store and office building to be erected by Audubon Building Co. General Supply & Construction Co. of New York, represented in New Orleans by R. D. Gottlieb of New York, has contract for erection; reported that steel work will begin February 1 and that building will be completed by October 1; structure will be 8 stories, instead of 14 as originally planned; 108x144 feet; steel frame; fireproof; outside wall will begin on a water table course of granite, and from there to level of second floor cornice will be of buff Bedford stone; above this, wall will be of brown or red pressed brick, with white terra-cotta trimmings; entire area of building will have concrete basement, to be used for storage purposes by stores; arrangements have been made for arcade 15 feet wide; eight stores, each having second story, besides basement; remaining five floors will contain about 40 offices; light court near center of building; four passenger elevators, one freight elevator, and provision has been made for freight elevator for each of stores separately; steam heating; electric lighting; vacuum cleaning system; ventilating fans; house and fire pumps; concrete floors; interior hardwood finish. (Previously mentioned.)

Oklahoma City, Okla.—New banking company, organized with W. E. Hodges president, will remodel building at Main street and Broadway as bank building.

Orange, Texas.—E. J. Chauvin, contractor of Orange, has contracted to reconstruct building destroyed by fire; new structure to be of brick; 50x90 feet.

**CHURCHES**

Alexandria, Va.—Rev. Chas. T. Warner, Theological Seminary, Va., reports organization for purchase of land; no building to be erected at present. (Recently incorrectly reported to erect edifice.)

Baltimore, Md.—Harlem Park Methodist Church, Rev. Harry D. Mitchell, pastor, Gilmer St. near Edmondson Ave., awarded contract to John Cowan, 106 West Madison St., Baltimore, for erection of edifice to replace burned structure; fireproof; electric wiring will be covered and insulated; cost about \$25,000.

Beaumont, Texas.—Jewish Congregation, I. J. Abelman, president, contemplates erection of edifice.

Bessemer, Ala.—First Methodist Church contemplates erecting edifice to cost \$30,000. Address The Pastor, First Methodist Congregation.

Charleston, S. C.—Morris Street Baptist Church awarded contract to John A. McCormack, 34 Ashley Ave., for erection of

edifice to cost \$23,000; brick veneer; 68x127 feet; ordinary construction; hot-air heat; gas and electric lighting. (See "Machinery Wanted.")

Chattanooga, Tenn.—First Presbyterian Church, J. W. Bachman, pastor, 221 McCallie Ave., will soon receive proposals through Chas. E. Bearden, architect, for superstructure of \$100,000 edifice noted in November and previously; cream-colored brick building, with tile roof and copper-covered dome; marble columns in portico; tile flooring; quartered-oak interior finish; terra-cotta trimming; steel trusses and columns; plumbing; electric and gas lighting; steam heat; McKim, Mead & White, 160 Fifth Ave., New York, associate architects; H. S. Probasco, American National Bank Bldg., Chattanooga, chairman of building committee.

Beaumont, Texas.—First Christian Church will erect edifice; red pressed brick; cost \$20,000; plans prepared by St. Louis (Mo.) architect.

Chattanooga, Tenn.—Central Baptist Church, C. S. Wilkins, chairman of building committee, 1327 Market St., Chattanooga, awarded contract at \$5200 for gray vitrified brick for church edifice to James Saffern, contractor, 12 East Terrace St., Chattanooga; plans by R. H. Hunt, James Bldg., Chattanooga. (Separate bids on materials, etc., for completion of edifice recently noted to be opened January 9.)

Kansas City, Mo.—St. George Episcopal Church, Rev. Cyrus Townsend Brady, rector, will erect edifice; plans probably by Howe & Holt, architects, Kansas City.

Lenoir, N. C.—Lutheran congregation will erect edifice. Address The Pastor, Lutheran Church.

Lenoir, N. C.—Methodist congregation contemplates erecting edifice. Address The Pastor, Methodist Church.

McKinney, Texas.—Methodist congregation will erect edifice in South McKinney. Address The Pastor, Methodist Church.

Mobile, Ala.—Dauphin Way Baptist Church will award contract in February for erection of \$30,000 edifice recently noted; plans by R. H. Hunt, Chattanooga, Tenn.; brick building; Gothic style; size about 110x120 feet; ordinary fireproof construction; possibly steam heat; electric lighting; E. E. George, pastor, 17 Ann street, chairman building committee.

Montevallo, Ala.—Methodist congregation will erect edifice to cost about \$10,000. Address The Pastor, Methodist Church.

Palestine, Texas.—St. Philip's Episcopal Church will erect brick veneer edifice. Address The Pastor, St. Philip's Episcopal Congregation.

Sherman, Texas.—St. Stephen's Episcopal Church will erect edifice; concrete foundation and basement walls; plans by John Tulloch, Linz Annex, Sherman.

Summerland, Miss.—Rev. H. B. Rawls can be addressed for information regarding erection of church building and parsonage. It is proposed to erect.

**COURTHOUSES**

Baton Rouge, La.—Police Jury of East Baton Rouge parish, F. A. Woods, secretary, contemplates erection of courthouse and jail, but has as yet taken no definite action; permanent committee appointed with Joseph Gebelin president.

Canadian, Texas.—Hemphill County Commissioners have, it is reported, closed contract for erection of courthouse; three stories and basement; pressed brick; estimated cost, \$40,000; plans by C. H. Page, Jr., & Bro., Austin, Texas. (Previously mentioned.)

Christiansburg, Va.—George W. Wilson, clerk Board of Supervisors, will receive bids until February 15 for remodeling courthouse; certified check, \$100; plans and specifications at Montgomery Clerk's office; plans by H. H. Huggins, Roanoke, Va.; estimated cost, \$20,000. (Recently mentioned.)

Durham, N. C.—Durham County Commissioners and city officials will consider erection of county courthouse, municipal building and theater to replace structure recently burned.

Monticello, Fla.—Jefferson County Commissioners awarded contract to E. C. Hosford & Co., Eastman, Ga., and Bartow, Fla., for erection of courthouse to cost about \$40,000. (Recently mentioned.)

Towson, Md.—Baltimore County Court-house Commission has opened bids for erection of annex to courthouse; all proposals exceed appropriation of \$60,000, and action was deferred until increased appropriation can be secured; David M. Andrew Co., 404 Vickers Bldg., Baltimore, is lowest bidder at \$120,300; Baldwin & Pennington, 330 North Charles St., Professional Bldg., Baltimore, are archi-

tecs; Henry P. Mann, County Commissioner. (Recently mentioned.)

**DWELLINGS**

Augusta, Ga.—Chas. B. Harman awarded contract to Mobley & Crooks, 109 Montgomery Bldg., Augusta, for erection of proposed \$6000 dwelling; 10 rooms, two baths and pantries; heating not decided; electric lighting; plans by contractors.

Baltimore, Md.—William Olwine has purchased site on Grayson street, 172x76 feet, and will erect residence.

Baltimore, Md.—Joshua E. Franklin, Culver avenue, near Grindin, La., has purchased site on Brice street, 396x65 feet, and will erect number of two-story brick dwellings with foundations of heavy stone laid in cement.

Baltimore, Md.—Herman Scherr will erect residence on Grayson street; site 172x76 feet.

Baltimore, Md.—William T. Russell, 924 West Mulberry St., will erect five three-story dwellings on Chelsea terrace; 22x36 feet each; cost \$12,500.

Baltimore, Md.—Mortimer W. West, 223 St. Paul St., has had plans prepared by Jacob F. Gerwig, 210 East Lexington St., Baltimore, for seven dwellings on Kate avenue, West Arlington; two stories; frame construction; cost about \$15,000.

Baltimore, Md.—James Keely, Gorman Ave., near Baltimore St., has had plans prepared by Jacob F. Gerwig, 210 East Lexington St., Baltimore, for 26 dwellings on Gorman avenue; two stories; 13x44 feet; cost about \$30,000; owner builder.

Baltimore, Md.—Mrs. Mary Fear, 2101 Bolton St., awarded contract to Farwell & Thomas, Baltimore, for erection of 15 dwellings on Herbert street; two stories; brick; 12x20 feet; foundation, heavy stone laid in cement; fancy galvanized-iron cornices; plans by F. E. Beall, 213 St. Paul St., Baltimore.

Baltimore, Md.—David C. Sionaker, 625 West Fayette St., has purchased site 60x120 feet on Chelsea avenue and will erect residence.

Baltimore, Md.—William J. Clendenin of Clendenin Bros., 1402 North Broadway, will erect three dwellings on East North avenue; three stories; facades of press brick, with cut-stone trimmings; cost about \$10,000.

Beaumont, Texas.—E. J. Bode and Joseph Fleming reported to erect 100 dwellings.

Birmingham, Ala.—A. A. Walker will erect \$8000 residence; plans by Miller & Martin, Birmingham; two stories; frame and half timber; ordinary construction; hot-air heat; electric lighting; bids to be opened January 23.

Birmingham, Ala.—Birmingham Realty Co. awarded contract to S. Dombey for erection of \$3500 residence; plans by D. O. Whildin, Title Guarantee Bldg., Birmingham; two-story frame building; ordinary construction; hot-air heat; electric lighting.

Birmingham, Ala.—J. B. Russell will erect two-story frame dwelling; ordinary construction; hot-air heating; electric lighting; cost \$5000.

Birmingham, Ala.—H. M. Robertson will erect \$5000 dwelling; two stories; frame; ordinary construction; hot-air heating; electric lighting.

Birmingham, Ala.—Emma M. Callahan will erect \$4000 residence; two-story frame; ordinary construction; hot-air heating; electric lighting.

Birmingham, Ala.—T. J. Sheppard will erect two-story frame dwelling; ordinary construction; hot-air heating; electric lighting; cost \$5500.

Birmingham, Ala.—Mr. Frierson will erect \$3300 dwelling; plans by D. O. Whildin, 711 Title Guarantee Bldg., Birmingham; two-story frame structure; hot-air heat; electric lighting.

Charleston, S. C.—Navy-yard Building & Investment Co., James Allan, president, recently noted organized, will open bids about February 10 for erection of 30 six to eight-room houses at Chicora place for employees of Charleston navy-yard; cost \$50,000; plans by H. I. Walker; competitive bids asked.

Chattanooga, Tenn.—R. T. Wright, Temple Court, will erect proposed three five-room frame dwellings at Duncan avenue and Lyle street; one-story; shingle roof; hard pine interior finish; cabinet mantels; plumbing; gas and electric lighting; cost \$4500; construction commenced.

Chattanooga, Tenn.—M. C. Hasselle, care of Converse Bridge Co., will erect \$4000 dwelling on Union avenue; plans by Huntington & Sears, News Bldg., Chattanooga; two stories; brick; slate roof; quartered oak and hard pine interior finish; cabinet mantels;

gas and electric lighting; hot-water heat; plans ready for proposals soon.

Chattanooga, Tenn.—E. Waterhouse, care of Smartt Bros. & Co., 705 Broad St., will not award general contract for erection of \$4000 two-story brick and stucco residence on Mission Ridge (suburb); eight rooms and bathroom; hot-air heating; electric lighting and gaspiping; plans by D. A. Reamer, First National Bank Bldg., Chattanooga; owner is receiving proposals for subcontracts. (Previously mentioned.)

Chattanooga, Tenn.—W. P. McBroom will erect bungalow on Mission Ridge.

Chattanooga, Tenn.—H. H. Embrey, care of Trigg, Dobbs & Co., 701 Broad St., awarded contract to James M. Potts, 8 Bailey Ave., Chattanooga, for erection of two two-story dwellings at 1019 and 1021 East 9th street; cost about \$4000; brick; tin roof; hard pine interior finish; gas and electric lighting; cabinet mantels; plumbing; plans by Wilbur M. Johnson, 502 East 4th St., Chattanooga. (Mr. Embrey previously noted to erect dwellings.)

Chevy Chase, Md.—Miss S. B. Sipe, The Ontario, Washington, D. C., has had plans prepared by Appleton P. Clark, Jr., Union Trust Bldg., Washington, D. C., for \$7000 residence at Chevy Chase.

Chevy Chase, Md.—L. E. Brockett awarded contract to John Simpson's Sons, Forest Glen, Md., for erection of residence in Chevy Chase; cost \$7500.

Covington, Va.—Baptist Church contemplates erection of parsonage. Address The Pastor, Baptist Congregation.

Denton, Texas.—North Texas State Normal College had plans prepared by A. O. Watson, Austin, Texas, for principal's residence recently noted; 10 rooms; mill construction; cost \$5000.

Gadsden, Ala.—Chas. Smith will erect residence.

Gaffney, S. C.—W. N. Turner will erect dwelling to replace burned structure.

Gaffney, S. C.—W. N. Austell will erect residence.

Gallatin, Tenn.—S. J. Fletcher will erect stone dwelling to cost about \$30,000.

Galveston, Texas.—Mrs. Sophie Hansen awarded contract to Jansen & Zempeter, Galveston, for erection of dwelling; two stories; frame and brick; eight rooms; cost \$8000.

Hendersonville, N. C.—Columbia Park Land & Improvement Co. contemplates erection of 300 cottages; minimum cost \$5000. (See "Miscellaneous Enterprises.")

Long Beach, Miss.—E. H. Caraway will erect \$6000 cottage.

Long Beach, Miss.—Carl Gates will erect residence.

Long Beach, Miss.—C. B. Gates will erect residence.

Memphis, Tenn.—Speedway Land Co. is planning, it is reported, expending \$60,000 for improvements to its property, including erection of number of dwellings.

New Orleans, La.—G. B. Harrison will expend \$9000 in erection of double two-story residence recently mentioned; size 40x55 feet; hot-water or hot-air heating; electric lighting; plans and construction by owner.

Pikeville, Ky.—John W. Langley will erect small modern residence, for which Frank P. Milburn & Co., Home Life Co., Washington, D. C., was recently noted to prepare plans.

Reidsville, N. C.—H. R. Scott will erect \$10,000 residence.

Richmond, Va.—W. J. Gilman awarded contract to R. E. Elmore & Co., Richmond, for erection of six detached brick dwellings to cost \$25,000.

Richmond, Va.—R. E. Elmore will erect two detached brick dwellings; cost \$7000; R. E. Elmore & Co., Richmond, contractors.

Rogers, P. O. Stevenson, Md.—William C. Robinson, 336-342 North St., Baltimore, Md., will erect residence at Rogers.

Roland Park, Station L, Baltimore, Md.—E. E. Cruzen, Professional Bldg., Baltimore, has had plans prepared by M. A. Long, 6 Elmhurst Rd., Roland Park, for residence in Roland Park; two and a half stories; brick and stucco; 45x60 feet; parquet flooring; foundation of heavy stone laid in cement; roofing, slate or terra-cotta; cost about \$18,000; contractors estimating include Roland Park Co., Roland Park; H. A. Kelbaug, 244 North Mount St., Baltimore, and Christian Schratke, Rapsburg, Md.

Roland Park, Station L, Baltimore, Md.—Harry B. Rasch, auditor, United Fruit Co., 104 East Pratt St., Baltimore, has had plans prepared by Howard Gill, 923 West Lexington St., Baltimore, for residence at Roland Park; two and a half stories; frame construction; foundation, heavy stone laid in



cement; hot-water heat; electric lights; cost about \$7000; contractors estimating include B. F. Bennett Engineering Co., 123 South Howard St.; Gladfelter & Chambers, 2072 Woodberry Ave.; John Cowan, 106 West Madison St., all of Baltimore, and Roland Park Co., Roland Park.

St. Louis, Mo.—Brewster Ames Building Co. will expend \$50,000 in erection of dwellings.

St. Louis, Mo.—Clay Arthur Pierce will erect \$100,000 residence.

St. Petersburg, Fla.—H. C. Dent will open bids about January 26 for erection of proposed residence after plans by Bonnell & Sons, St. Petersburg, Fla.; two-story frame structure; 27x32 feet, with wide verandas; electric lighting.

Summerville, Ga.—Charles B. Harman awarded contract to Mobley & Crooks, Augusta, Ga., for erection of ten-room residence.

Tampa, Fla.—A. K. Gramming awarded contract to Bennett & Lowe, Tampa, for erection of bungalow to cost \$3000; plans by Louis F. Drake, Tampa.

Washington, D. C.—H. A. Kite, 1333 G St. N. W., has had plans prepared by A. H. Beers, 1333 G St. N. W., Washington, for nine dwellings, four at 7th and V streets N. W. and five at 8th and E streets N. E.; brick; cost about \$3000 each.

Washington, D. C.—C. B. Hite, 1505 Pennsylvania Ave. N. W., has had plans prepared by A. H. Beers, 1333 G St. N. W., Washington, for 12 residences on Georgia Ave. and Morton St.; six rooms; brick.

Washington, D. C.—Raphael A. Caslear of Caslear & Co., 1308 Wisconsin Ave. N. W., is having plans prepared by and awarded contract to John W. MacPherson, 1320 New York Ave. N. W., Washington, for seven dwellings at 33 and Q street N. W.; two stories; brick; five rooms and bath; total cost about \$20,000.

Washington, D. C.—William A. Hill of Moore & Hill, 1333 G St. N. W., awarded contract to Franklin T. Sanner, 1405 G street N. W., Washington, for erection of residence on Connecticut avenue N. W., recently mentioned; 12 rooms and four baths; 30x60 feet; brick and stone; interior finished in enameled basswood; cost about \$16,000; plans by A. H. Beers, 1333 G St., Washington, D. C.

Wylam, Ala.—Harbison-Walker Refractories Co., Farmers' Bank Bldg., Pittsburg, Pa., will erect 250 dwellings at Wylam for workmen in connection with \$350,000 fire-brick plant recently detailed under Birmingham.

## GOVERNMENT AND STATE BUILDINGS

Fortress Monroe, Va.—Buildings.—Bids will be received until February 15 for construction, heating, plumbing, electrical wiring and fixtures for two sets of field officers' quarters at Fortress Monroe. Information on application. Deposit of certified check of \$25 for plans and specifications. Ernest R. Tilton, Captain and Quartermaster, U. S. A., Constructing Quartermaster. (See "Heating Apparatus" in "Machinery, etc., Wanted.")

Gainesville, Ga.—Postoffice.—Wilmart Building Co., 1170 Broadway, New York, has contract at \$58,000 for erection of U. S. post-office at Gainesville; cast and wrought iron will be substituted for bronze for castings, lamp standards, lanterns and grilles; one-story-and-basement building; 46x55 feet; marble; semi-fireproof; hot-water heating; gas and electric lighting; plans by James Knox Taylor, Supervising Architect, Treasury Department, Washington, D. C. (See "Machinery Wanted.")

Greenville, Miss.—Postoffice.—Bids will be received at office of James Knox Taylor Supervising Architect, Treasury Department, Washington, D. C., until February 18 for construction complete of United States post-office at Greenville, in accordance with drawings and specifications, copies of which may be had at above office or of postmaster at Greenville, at discretion of supervising architect.

Mobile, Ala.—Quarantine Station.—E. Morgan, Newport News, Va., has contract for improvements at Federal quarantine station in Mobile Bay, costing about \$50,000; contract for piling and dredging awarded Home Dredging Co. of Mobile; buildings will consist of executive building, two detention quarters and three other structures for general use.

## HOTELS

Alexandria, Va.—Potomac Resort & Realty Corporation incorporated with \$25,000 capital stock; Paul Dulaney, Bristol, Va., president; William B. Matthews, Jr., 818 Colorado Bldg., Washington, D. C., vice-president.

Birmingham, Ala.—Brown Bros. & Co. have issued prospectus giving basis of plan upon which it is proposed to finance Hotel Mortimer; 100x140 feet; steel frame; fireproof; 12 stories; cost of building, \$640,000, and of site, \$160,000, making total of \$800,000. (Recently mentioned.)

Bluefield, W. Va.—Iron Lithia Springs Hotel Co. contemplates erection of addition.

Cameron, Texas.—Jeff D. Hedy purchased Auditorium Building, and will remodel as hotel.

Chattanooga, Tenn.—E. R. Betterton and associates have decided not to erect hotel previously mentioned.

Dallas, Texas.—Charles Hodges, proprietor St. George Hotel, has closed contracts for addition to be erected to St. George Hotel; four stories; 50x90 feet; steel, brick and concrete; fireproof; 42 rooms, 30 of which will have private baths; total of 150 rooms to be in entire building; lower floor to be used for business purposes; estimated cost, \$55,000; older portion of building will also be remodeled. (Previously mentioned.)

El Reno, Okla.—Southern Hotel will erect annex; 75x132 feet; brick; fireproof; contain 75 rooms and about 30 baths, giving entire structure total of 119 rooms and about 40 baths; floors to be reinforced; archway will be built over alley, connecting second and third floors of annex with old structure; estimated cost, \$50,000; plans approved and contract will soon be awarded.

El Reno, Okla.—Paulsen & Shafer will erect hotel; plans by E. E. Churchill; structure 75x105 feet; three stories; ordinary construction; heating not decided; electric lighting; passenger elevator; cost \$30,000 to \$35,000; date of opening bids not settled; H. C. Paulsen, manager.

Fort Worth, Texas.—Winfield Scott has approved plans for hotel to replace Oriental Hotel; two stories; brick and stone; 95x41 feet; first floor to be divided into four stores and second floor into 14 rooms. (Recently mentioned.)

Gulfport, Miss.—George Pierce will expend \$5000 in converting three-story brick building into travelers' hotel.

Hendersonville, N. C.—Columbia Park Land & Improvement Co. contemplates erection of 150-room hotel. (See "Miscellaneous Enterprises.")

Hickory, N. C.—D. S. Fry and Wm. P. Huffman have purchased site and will erect hotel; brick; four stories; main building with two wings and open court between; 64 rooms, besides spacious dining-rooms, parlors, halls, corridors, etc.; steam heat; private electric plant; passenger and truck elevators; rooms en suite with private baths; walks and drives to be arranged; hotel fronting on three streets; cost from \$60,000 to \$75,000; to be erected with view of adding 20 to 40 more rooms; plans are being prepared by W. Lee White.

Hickory, N. C.—Dr. D. S. Fry and William P. Huffman are having plans prepared by W. Lee White for hotel; four stories; brick; to consist of main building and two wings, with court between; private baths; steam heat; private electric plant to furnish light and operate passenger and freight elevators; estimated cost \$75,000.

Jacksonville, Fla.—W. A. Bisbee contemplates, it is reported, erection of 15-story hotel.

Little Rock, Ark.—Marion Hotel Co., Herman Kahn, president, will begin at once erection of annex to hotel; 50x140 feet; estimated cost, \$130,000. (Previously mentioned.)

Mount Airy, N. C.—Walter Martin will erect hotel for 100 guests.

Norfolk, Va.—Hague Hotel Corporation incorporated with \$5000 capital stock; J. W. O'Connor, president; J. M. O'Connor, vice-president; C. F. O'Connor, secretary-treasurer.

Oklahoma City, Okla.—Huckins Hotel & Office Building Co. incorporated with \$500,000 capital stock by Joseph Huckins, Jr., Marquand Huckins, J. M. Bass, all of Oklahoma City, Okla., and others to erect 10-story hotel and office building combined; estimated cost \$300,000; contract awarded to Selden-Breck Construction Co., St. Louis, Mo.; branch office of company in Texarkana, Ark. (Further facts recently mentioned.)

## MISCELLANEOUS STRUCTURES

Baltimore, Md.—Clubhouse.—Contractors estimating on construction of clubhouse for Maryland Motor Boat Club, recently mentioned, include George A. Blake, 301 Law Bldg.; Milton C. Davis, 5 Hopkins Pl.; William F. Shinnick & Co., 1725 Thames St.; Willard E. Harn, 2700 Huntington Ave.; J. Henry Miller, 110 Dover St., and Chas. L. Stockhausen, 532 St. Paul St.; all of Baltimore.

more; structure will be constructed free of shore; two stories; built on piles; frame; slate roof; shingled sides; main floor, wood finish only; second floor plastered; two stairways will connect with roof deck above piazza; stone and concrete foundation; electric lights; steam heat; 70x80 feet; cost about \$10,000; plans by Theodore Wells Pietsch, American Bldg., Baltimore.

Barbourville, Ky.—Business Buildings.—G. W. Tye will erect business building; three stories; brick.

Barbourville, Ky.—Lodge Building.—Labeled Lodge of Odd Fellows will erect lodge and business building; three stories; brick.

Barbourville, Ky.—Business Building.—Parker & Parker will erect four-story brick business building; construction has begun.

Barbourville, Ky.—Business Building.—Gibson Company will erect business building; two stories; brick; construction has begun.

Barbourville, Ky.—Business Building.—Miss Sallie Hoskins will erect two-story brick business building; construction has begun.

Barbourville, Ky.—Hospital.—Knox County Medical Society plans erection of hospital building.

Brunswick, Ga.—Business Building.—L. R. Aiken will erect business building; two stories; brick; first floor for garage, second floor for offices.

Brunswick, Ga.—Store Building.—S. H. Kress & Co., main office, New York, awarded contract to Bowen & Thomas, Brunswick, for erection of store building; two stories; 70x90 feet; gray brick with stone trimmings; steel ceiling; steam heat; elevator; gas and electric lights; plans by Julius H. Zeithor, Brunswick.

Center, Texas.—Business Building.—S. C. Gillis & Bro. will erect business building; three stories; brick.

Charlotte, N. C.—Clubhouse.—Charlotte Golf Club organized with Word H. Wood, president; J. S. Cothran, secretary and treasurer; will erect country club and establish 18-hole golf link course at cost of \$44,000.

Coleman, Texas.—Business Building.—Jack Wells awarded contract to L. L. Bragg, Coleman, for erection of business building; brick; steel ceiling; 25x100 feet.

Commerce, Texas.—Business Building.—J. C. Saner has had plans prepared by J. D. Mathews, Dallas, Texas, for business building; two stories; brick; cost about \$15,000.

Conway, S. C.—Store Building.—B. G. Collins will erect store building; brick; 30x80 feet.

Cordele, Ga.—Business Building.—Macris Bros. will erect two-story brick business building.

Corpus Christi, Texas.—Lodge Building.—Nueces Lodge, No. 96, I. O. O. F., will erect building recently mentioned; two stories; 40x80 feet; store below; lodgeroom above; electric lighting; cost about \$7000; O. H. Johnson, secretary.

Corsicana, Texas.—Odd Fellows' Home.—I. O. O. F. Widows and Orphans' Home will expend about \$10,000 for improvements; \$9000 for three-story brick building now used by boys; present laundry building will be converted into hospital after another story is added and new laundry building erected.

Fayetteville, N. C.—Business Building.—J. R. Tolar will erect business building.

Fitzgerald, Ga.—Jail.—Ben Hill county will receive bids until February 11 for construction of brick jail building recently mentioned; cost \$12,500; architect, J. R. MacEachron, 75 West Peachtree St., Atlanta, Ga.

Houston, Texas.—Hospital.—O. L. Norsworthy, Temple Bldg., will expend \$20,000 in erection of private hospital recently noted; three stories and basement; 45x77 feet; mill construction and brick veneer; hot-water heat; gas and electric lighting; Otis electric elevator; plans by E. C. Lamb, Houston, construction by days' work.

Huntsville, Ala.—Business Buildings.—J. E. Pierce will erect three two-story business buildings.

Jacksonville, Ala.—Business Buildings.—C. A. J. Hollingsworth and J. O. P. Treadway will erect business buildings to replace structures recently burned.

Jacksonville, Ala.—Business Buildings.—C. A. J. Hollingsworth and J. C. P. Treadway will erect new business buildings to replace those recently burned.

Kansas City, Mo.—Business Building.—Schoenberg Realty Co. will erect business building; three stories; brick.

Kansas City, Mo.—Hospital.—Building company organized by George Hawes, A. G. Hull, Francis Odell and others is having plans prepared by John W. McKecknie, Kansas City, for Penn Valley Hospital; 55x145 feet; fireproof; brick and stone; concrete floors and

girders; basement will contain heating and radium water plants; broad three-deck verandas supported by four white stone columns will extend entire height of building; cost about \$45,000.

Lexington, Ky.—Pythian Home.—Knights of Pythias will erect addition to Widows and Orphans' Home; two stories; brick; about 20 rooms; to be used as dormitory with accommodation for 60 inmates; cost about \$30,000; plans by Lanham Robertson, Covington, Ky. (Previously noted.)

Little Rock, Ark.—Lodge Building.—Forest Camp Lodge, Woodmen of the World, will erect lodge building; three stories; brick.

Little Rock, Ark.—Memorial Home.—Geo. W. Fair, Little Rock, has contract for erection of Ada Thompson Memorial Home; plans by Gibb & Sanders, Little Rock; two-story-and-basement building; 100x60 feet; ordinary construction; hot-water heat; laundry; cost \$25,000. (Recently mentioned.)

Little Rock, Ark.—Store Buildings.—H. M. Ramey contemplates, it is reported, erection of row of brick store buildings.

Louisville, Ky.—Laboratory.—Louisville Reach Laboratory of Chemistry, Bacteriology, Pathology, etc., incorporated with \$5000 capital stock by Ellis S. Allen, Bernard J. O'Connor and John L. Kendall.

Lynchburg, Va.—Cow Barn.—Thomas F. Ryan, New York, has had plans prepared for concrete cow barn to cost \$60,000.

Macon, Ga.—Store.—Burden Smith & Co. had plans prepared by F. A. Happ, Macon, for proposed addition and improvements to dry-goods building; addition 16x70 feet to be erected at rear and first floor extended 30 feet; steam heat; electric lighting and fans; electric elevator; contract not awarded.

Madisonville, Tenn.—Jail, etc.—Monroe county had plans prepared by Pauly Jail Building Co., St. Louis, Mo., for building recently mentioned; jail with jailer's residence; 32x63 feet; two stories; jail to be of fireproof and dwelling portion of ordinary construction; hot-water heat; cost \$12,000; bids to be opened February 11 on complete building, including cells, furnace, etc.; W. A. Thornley, County Clerk, Madisonville.

McDonough, Ga.—Masonic Temple.—Fraternal Lodge No. 37, F. and A. Masons will erect Masonic temple; two or three stories.

Memphis, Tenn.—Hospital.—B. G. Lowrey, recently mentioned as promoter, states that plans will not be definitely settled before April or May for construction of Baptist hospital.

Nashville, Tenn.—Business Buildings.—W. T. Hardison & Co. has had plans prepared by C. K. Colley, Nashville, for two business buildings; fireproof; reinforced concrete and brick; three stories and basement; cost about \$15,000.

Oklahoma City, Okla.—Store Building.—Charles A. McMillan, Duluth, Minn., has contract for erection of Augusta Wright Building; five stories and basement; fireproof; reinforced concrete; cost about \$85,000.

Oklahoma City, Okla.—Store Building.—Bass & Harbour will erect annex to store building; four or five stories; to be connected with present structure by bridge over alleyway.

Orange, Va.—Store.—Emil Levy awarded contract to E. A. Walters, Culpeper, Va., for erection of store building previously noted to be rebuilt; semi-fireproof construction; 65x68 feet; pressed brick; hot-water heat; electric lighting; cost \$12,000; plans by N. F. Wingfield, Charlottesville, Va. (See "Machinery Wanted.")

Orange, Va.—Store Building.—Emil Levy awarded contract to E. A. Walters, Culpeper, Va., for erection of store building; brick; pressed brick front; 67x68 feet; plate-glass windows and doors; ornamental metal ceilings; two stories; steam heat; electric lights.

Port Arthur, Texas.—Department Store.—J. M. Hailer, Yoakum, Texas, will erect store building in Port Arthur; three stories; brick; 75x125 feet; elevators; cost about \$20,000.

Port Arthur, Texas.—Hospital.—John W. Gates had plans prepared by C. A. Logan, Port Arthur, for memorial hospital (the Mary Gates) recently noted; fireproof construction, with vacuum heating plant and electric lighting; electric elevators; cost \$30,000; hospital to be donated to city.

Richmond, Va.—Store Buildings.—Straus, Gunst & Co., Box 687, will erect two brick store buildings, to cost \$10,000.

Richmond, Va.—Business Buildings.—W. J. Gilman awarded contract to R. E. Elmore & Co., Richmond, for erection of four business buildings to cost about \$12,000.

Richmond, Va.—Store Building.—Frankel & Elsmann Corporation awarded contract to R.

H. Richardson & Son, Richmond, for erection of brick store building.

Rome, Ga.—Store, etc.—E. G. Peters building, recently noted to be rebuilt, will be two stories; brick; store and office on first floor; hall above; cement floor in basement; hardwood floor in store; steel ceiling; piped for gas lighting and wired; cost \$4700. (See "Machinery Wanted.")

Silver Creek, Miss.—Business Building.—Rawls & Stuart will erect brick business building.

Silver Creek, Miss.—Business Building.—F. B. Benson & Co. will erect brick business building.

South Coffeyville, Okla.—Business Building.—Dennis Rice, Plainview, Texas, will erect two-story business building in South Coffeyville.

St. Joseph, Mo.—County Jail.—Buchanan county will vote January 26 on \$100,000 bond issue for erection of county jail. Address County Commissioners.

Thorndale, Texas.—Business Buildings.—W. L. Mahawk awarded contract to S. F. Evans and L. M. Lee, Taylor, Texas, for erection of two business buildings, one to cost \$5500, the other \$3000; plans by Henry Struve, Taylor, Texas.

Temple, Texas.—Stores, etc.—Sherrill Mercantile Co. will expend \$7500 in construction of building, contract recently noted awarded to J. H. Davis, Temple; plans by contractor; two-story structure; 55x60 feet; brick; iron and plate-glass fronts; grocery on first floor, offices above; electric lighting.

Temple, Texas.—Lodge Building.—B. P. O. Elks will erect lodge building to cost about \$40,000; J. E. Ferguson, P. L. Downs, W. C. Campbell and others executive committee.

Thornton, Texas.—Store, etc.—Wm. Guilford awarded contract to B. L. Jones, Thornton, for erection of business building recently mentioned; two-story brick; gravel roof; size 25x75 feet; ordinary construction; grates; cost \$5000; plans by contractor.

Washington, D. C.—Store Building.—O. J. DeMott & Co., 1231 G St. N. W., awarded contract to Charles A. Campbell, 1226 H St. N. W., Washington, for erection of store building at 12th and G streets previously mentioned; four stories; 37x45 feet; main entrance covered by marquee of ornamental iron and glass and flanked on both fronts by plate-glass windows; walls above will be of yellowish brick surmounted at fourth floor by projecting dull-red Spanish tile roof with exposed rafters; spandrels below windows in upper floors will be copper treated in verde; fireproof; Spanish renaissance style; cost about \$35,000; plans by B. Stanley Simmons, 931 F St. N. W., Washington.

West, Miss.—Business Building.—W. D. Brock will rebuild structure recently reported burned; plans not made; size about 26x80 feet.

Yokum, Texas.—Business Building.—F. J. Baby will erect business building; brick; 25x80 feet.

Union Springs, Ala.—Library.—Union Springs Library Association will erect library building.

### MUNICIPAL BUILDINGS

Albany, Ga.—City Hall.—Committee has selected site, 85x125 feet, on which to erect three-story city hall; bond issue of \$50,000 is available. Address The Mayor. (Recently mentioned.)

Dallas, Texas.—Fire Station.—Board of Municipal Commissioners has ordered bids for erection of fire station in Oak Lawn and for furnishing equipment; cost \$20,000; J. M. Preston, City Engineer.

Durham, N. C.—Building.—City officials and Durham county will consider erection of county courthouse, municipal building and theater to replace structure recently burned. Address The Mayor.

El Reno, Okla.—Convention Hall, etc.—City Council will be petitioned to pass resolution providing election for voting on issuance of \$25,000 of bonds to purchase ground to be used for park and fair purposes, erection of convention hall, etc. Address The Mayor.

Hannibal, Mo.—City Hall.—City has voted \$75,000 of bonds for erection of city hall. Address The Mayor.

Independence, Mo.—Jail.—H. H. Pendleton, City Engineer, will prepare plans for brick jail building.

Shawnee, Okla.—Convention Hall and Hospital.—City had plans prepared by E. J. Peters, Shawnee, Okla., for convention hall and hospital recently mentioned; fireproof buildings; steam heat; cost \$50,000 each; bids opened in February.

Tulsa, Okla.—Municipal Improvements.—City will vote February 16 on issuance of \$10,000 for city storage building and \$20,000

for improvements at fire department; W. E. Rhode, Mayor.

### RAILWAY STATIONS

Mansfield, La.—Mansfield Railway & Transportation Co. will, it is reported, erect depot.

Natchez, Miss.—Mississippi Central Railroad awarded contract to Geo. B. Swift Company, Chicago, Ill., for erection of passenger and freight station previously mentioned; fireproof construction; steam heat; electric lighting; cost \$50,000; plans by Frank P. Milburn & Co., Home Life Bldg., Washington, D. C.

Oklahoma City, Okla.—Chicago, Rock Island & Pacific Railway, J. B. Berry, chief engineer, Chicago, Ill., have, it is reported, concluded arrangements for erection of union station to cost \$25,000.

Ruston, La.—Chicago, Rock Island & Pacific Railway, W. M. Whitenon, general superintendent, Little Rock, Ark., will erect union depot at Ruston; plans are prepared.

St. Louis, Mo.—St. Louis Terminal Railroad Association will not erect passenger and freight station at entrance of Eads Bridge tunnel. (Recently incorrectly noted.)

Tulsa, Okla.—Missouri, Kansas & Texas Railway, S. B. Fisher, chief engineer, St. Louis, Mo., will erect passenger station recently mentioned; 25x100 feet; ordinary construction; natural-gas heating; electric or gas lighting; plans and erection by company.

Washington, D. C.—Board of District Commissioners (Henry B. F. Macfarland and others), Southern Railway, D. W. Lum, chief engineer, Washington, and others have agreed to locate proposed South Washington railroad substation at 7th and C streets S. W.; according to plans outlined, station building will be on level with 7th street; from station passageway will be built under tracks to point underneath middle of two inside tracks; steps will lead to long platform between two inside tracks, where passengers will board trains.

Winchester, Ky.—Lexington & Eastern Railway, W. A. McDowell, general manager, Lexington, Ky., has, it is reported, had plans prepared for erection of depot at Winchester.

### SCHOOLS

Abbeville, S. C.—City will issue \$20,000 of bonds for erection of high-school building and remodeling present school building. Address The Mayor.

Adairsville, Ga.—Cherokee Baptist High School, H. M. Veatch, chairman building committee, will erect boys' dormitory; two stories and basement; brick; shingle roof; hard pine interior finish; cabinet mantels; plumbing; electric lighting; plans by Huntington & Sears, News Bldg., Chattanooga, Tenn.

Alexandria, La.—City will erect \$40,000 school building in West End. Address The Mayor.

Alexandria, La.—Rapides parish contemplates erection of \$40,000 school building; D. B. Showalter, superintendent of Parish School Board, Alexandria.

Arlington, Texas.—City will rebuild North Side School building reported burned; loss about \$15,000. Address The Mayor.

Atlanta, Ga.—City will vote about middle of March on \$500,000 bond issue for erection of school buildings. Address The Mayor.

Bartlesville, Okla.—City had plans prepared by C. W. Squires, Emporia, Kans., for \$50,000 high-school building recently mentioned; brick; 86x110 feet; heating not decided; gas and electric lighting; date of opening bids not set.

Broussard, La.—Catholic congregation contemplates erection of parochial school to cost \$10,000 to be conducted by Sisters of Divine Providence, San Antonio, Texas.

Denton, Texas.—City has had plans prepared by Overton Parr, McAlester, Okla., for central school building; three stories; cost about \$30,000.

Elberton, Ga.—City will vote February 16 on \$35,000 bond issue for erection of school building. Address The Mayor.

El Paso, Texas.—City contemplates issuing \$200,000 or \$250,000 of bonds for erection of high-school building. Address The Mayor.

Graymont, P. O. Birmingham, Ala.—City will vote February 13 on \$10,000 of bonds for acquiring sites and erecting school buildings; W. A. Lester, Mayor.

Houston, Texas.—City awarded contract to D. H. Miller, Houston, at \$7500 for erection of six-room school building for colored children. (Recently mentioned.)

Morgan City, La.—Saint Mary parish appropriated \$5000 for erection of school building. Address County Commissioners.

Muskogee, Okla.—City will vote January 23 on \$300,000 bond issue for erection of additional school buildings. Address The Mayor.

Norfolk, Va.—City contemplates erection of annex to Seventh Ward School to cost \$20,000. Address The Mayor.

Plumtree, N. C.—Lee-McRae Institute is having plans prepared by W. P. R. Pember, Bristol, Va.-Tenn., and Johnson City, Tenn., for \$10,000 school building; frame; three stories and basement; ordinary construction; steam heat; electric lighting; no general contract; material and equipment to be bought and some subcontracts awarded. (See "Machinery Wanted.")

Port Arthur, Texas.—John W. Gates had plans prepared by C. A. Logan, Port Arthur, for commercial and dormitory buildings recently mentioned; concrete and brick structures; fireproof; vacuum heat; electric lighting; cost \$30,000 each; bids to be opened about April 15; buildings to be given to city.

Richmond, Va.—City awarded contract to John Amrhein & Bro., 20 North Harrison St., Richmond, at \$24,436 for erection of Highland Park School building recently mentioned; two stories; 12 rooms and auditorium; concrete and pressed brick; tile roof; fireproof stairs and corridors; hot-air heat; electric lights; separate contracts for heating, plumbing, ventilating and electric wiring; size of structure, 64x124 feet; plans by Charles M. Robinson, 10th and Main Sts., Richmond.

Richmond, Ky.—Bids will be opened February 17 for erection of girls' dormitory, model school building; central heating and lighting plant and manual-training building, additions to memorial hall, heating and lighting appliance for said building and for university hall, together with distributing system of heating and lighting for same, at Eastern Kentucky State Normal School, Richmond; bids to be received as follows: On heating and lighting plant and manual-training building and distributing system and heating appliances for university hall, at office of Anderson & Frankel, architects, Lexington, Ky.; on girls' dormitory, model school and addition to memorial hall, at the office of C. C. & E. A. Weber, architects, Cincinnati, Ohio; bids may be made on any part or all of said work, and should be addressed to board of regents, in care of respective architects; certified checks for 2 per cent. amount of bids; plans and specifications on file at office of architects or at office of the Normal School, Richmond. (See "Machinery Wanted.")

San Angelo, Texas.—City will vote February 13 on \$32,000 bond issue for erection of two ward-school buildings. Address The Mayor.

Shawnee, Okla.—School district will erect high-school and ward-school buildings; fireproof construction; steam heat; cost \$125,000 for both; plans by E. J. Peters and A. C. Davis; bids opened in February; J. T. Knouse, secretary board. (Recently noted.)

Sparta, Tenn.—City contemplates issuing \$15,000 of bonds for erection of high-school building. Address The Mayor.

Texarkana, Texas.—City will vote February 9 on \$125,000 bond issue for erection of high-school building. Previous election recently noted as being declared void. Address The Mayor.

Tuscaloosa, Ala.—City will probably vote on \$25,000 bond issue for erection of high school. Address The Mayor.

Waco, Texas.—Baylor University contemplates erection of \$15,000 gymnasium.

Washington, D. C.—Bids will be opened January 25 for erection of addition to Business High School on R street N. W.; blank forms of proposals, etc., on file at office of chief clerk, Engineer Department, Room 427 District Bldg.; bidders must state time in which building will be completed, as time as well as price will be prime consideration; Henry B. Macfarland, Henry L. West, Spencer Crosby, Commissioners, District of Columbia.

Wilburton, Okla.—City will probably vote on issuance of \$50,000 of bonds for erection of high-school building. Address The Mayor.

Woodsdale, P. O. Wheeling, W. Va.—Ohio county will vote on issuance of \$43,000 of bonds for erection of school building in Woodsdale. Address County Commissioners. (Recently mentioned.)

Wynnewood, Okla.—City will vote January 30 on \$15,000 bond issue to purchase site and erect school building. Address The Mayor.

### THEATERS

Baltimore, Md.—Charles N. Boulden, 19 East Saratoga St., has charge of negotiations whereby store at 314 West Lexington

street will be remodeled as moving-picture theater.

Baltimore, Md.—Alfred Mason, 746 West Baltimore St., Baltimore, has completed plans and specifications for moving-picture theater to be erected at 615 North Fremont avenue by Greenbaum & Evatt. Estimates are being received from James F. Morgan, 1300 South Charles St.; B. F. Bennett Building & Engineering Co., 123 South Howard St.; William Butzler, 223 North Calvert St., and John D. Baker, 700 East Monument St., all of Baltimore.

Barboursville, Ky.—Nimrod Lunsford, W. H. Detherage and John Lawson will erect building to contain theater, etc. (See "Bank and Office Buildings.")

Baton Rouge, La.—Ernst Boehringer, manager Columbia Theater, awarded contract to J. Newsom for alterations and improvements to Abramson Building; brick structure; to be converted into electric theater, etc.; plans by Mr. Newsom. (See "Machinery, etc. Wanted.")

Durham, N. C.—City officials and Durham county will consider rebuilding of municipal building recently burned. (See "Municipal Buildings.")

Jacksonville, Fla.—W. A. Bisbee contemplates, it is reported, erection of opera-house.

Kansas City, Mo.—Leo N. Leslie is interested, it is reported, in erection of vaudeville theater.

Washington, D. C.—Amusement Building.—Arcade Amusement Co., Union Trust Bldg., has leased old car barn on 14th street and is having plans prepared by Averill, Hall & Adams, Washington, for remodeling into amusement building; fireproof; on upper floor will be located skating rink, moving-picture theater; seating 300, 14 bowling alleys, billiard and pool parlor, shooting gallery, department for ladies' and children's games; rooms for other amusements, cafe, etc.; roof garden and ballroom on roof; on ground floor will be garage for automobiles, with space for several hundred machines.

Washington, D. C.—Washington Auditorium Co., incorporated with \$500,000 capital stock by Charles J. Bell of Bell & Co., 1406 G St. N. W.; Scott C. Bone, president Washington Herald Co., 734 15th St. N. W.; John T. Devine, proprietor The Shoreham, 15th and H Sts. N. W., and others, to erect convention hall and theater; have option on site 200x500 feet.

### WAREHOUSES

Baltimore, Md.—Bidders on tobacco warehouse to be erected for State of Maryland at Conway, Charles and Light streets will include: Charles L. Stockhausen, National Marine Bank Bldg.; John Waters, 23 East Centre St.; Edward Watters & Co., 532 St. Paul St.; Eugene D. Springer, 424 South Charles St.; American Contracting Co., American Bldg.; Engineering-Contracting Co., 207 American Bldg.; J. Henry Miller, 110-112 Dover St.; Henry S. Rippel, 1-7 Clay St.; B. F. Bennett Engineering Co., 123 South Howard St.; Morrow Bros., 218 West Saratoga St.; Monmonier & Sorrell, 308 Laurens St.; Noel Construction Co., Calvert and German Sts., all of Baltimore; Wells Bros. Company and Ambrose B. Stannard, both of New York; Cramp & Co., Philadelphia, Pa.; George A. Fuller Company, Munsey Bldg., Washington, D. C.; Daniel Harding, Towson, Md. Plans by Baldwin & Pennington, Professional Bldg., Baltimore, at whose office bids will be received. (Further facts recently mentioned.)

Baltimore, Md.—John Murray, 733 George St., will erect carriage-house at 820 George street; 30x84 feet; first floor for storage of vehicles and second for warehouse purposes; cost \$3000.

Birmingham, Ala.—Wood & Crabbe Grain Co. will erect storage warehouse, 140x100 feet.

Hartselle, Ala.—Farmers' Union Warehouse & Storage Co. increased capital stock from \$7000 to \$15,000.

Little Rock, Ark.—Arkansas Farmers' Union Cotton Co., organized with \$450,000 to \$1,000,000 capital stock; consolidation of 88 cotton warehouses throughout State and the Farmers' Union Cotton Co. and Arkansas organization of company which embraces cotton-raising States; representing capitalization of about \$10,000,000; central sales office will be in Little Rock, in charge of B. A. Meador; Ben L. Griffin, Conway, Ark., also interested in company, has been elected president of Arkansas Cotton Bureau, which is to be connected with present organization; committee appointed composed of John Bowers, Jacksonville, Ark., State president; M. F. Dickinson, Conway, Ark., State secretary, and W. T. Ham, Van Buren, Ark., chairman executive committee.



Washington, N. C.—Jonathan Havens will rebuild hay and grain warehouse and grist mill recently reported burned; will erect five-story brick building of mill construction; cost \$25,000; plans by owner; bids to be opened February 1.

## RAILROAD CONSTRUCTION

### RAILWAYS

Abilene, Texas.—Official: The Abilene & Southern Railway Co. has filed charter, and work is in progress between Abilene and Ballinger, Texas. Grading about completed from Abilene to Winters, 35 miles, and track-laying under way. Not decided whether construction will be continued south of Ballinger. Charter permits a line 200 miles long. Morgan Jones, Abilene, Texas, president; G. M. Dodge, Council Bluffs, Iowa, vice-president; D. T. Bomar, Fort Worth, Texas, counsel; W. E. Kaufman, Abilene, Texas, secretary and treasurer. The officers are also directors, other members of the board being Ed S. Hughes and J. M. Radford of Abilene, Texas; J. W. Broad of Fort Worth, Texas; C. A. Doose and C. S. Miller of Ballinger, Texas. Percy Jones of Abilene is engineer in charge, and Morgan Jones is personally supervising construction and equipment. A later press report from Austin, Texas, says the main line is from Abilene to Sonora, Texas, 100 miles, with a branch from near Ballinger northwest to San Angelo, Texas, 40 miles. Gen. Greenville M. Dodge, chairman of the Colorado & Southern Railway, is one of the incorporators. The two roads connect at Abilene.

Altus, Okla.—The Altus, Roswell & El Paso Railway Co. is reported to have arranged with the St. Louis Trust Co. for financing, and work is to be started at several additional points. About 55 miles are already graded, and work is being continued. Edward Kennedy of Altus is president.

Amarillo, Texas.—The Tucumcari & Memphis Railway Co. is reported chartered in New Mexico, with headquarters at Chicago, presumably to complete the Amarillo and Tucumcari extension of the Rock Island; capital \$1,500,000. B. L. Winchell, president of the Rock Island, heads the list of incorporators, the others being E. C. Lindley, George H. Crosby, M. L. Bell and S. T. Fulton.

Amarillo, Texas.—Col. B. F. Yoakum of the Rock Island and Frisco systems is reported as saying that it is intended to complete the Rock Island line from Amarillo, Texas, to Tucumcari, N. M., and work will be under way within 30 days. C. M. Case is chief engineer at Fort Worth, Texas.

Bryan, Texas.—Reported that W. C. Davis, representative from this (Brazos) county, will introduce a bill in the Legislature for building a railroad from the State Agricultural and Mechanical College to Bryan, the work to be done by the State.

Buchanan, Va.—Reported that a railroad several miles long will be built by a syndicate of Pennsylvanians who have leased the Arcadia property near Buchanan and will develop timber lands. The Mayor may be able to give information.

Bartlesville, Okla.—A letter to the Manufacturers' Record says that the Scandia-German Portland Cement Co. proposes to utilize an old grade to construct a railroad from Bartlesville, five miles south, where it is to build a plant. C. J. Peterson of Iola, Kans., is promoting the company. There is no railway projected to Ochelata. This is with reference to a recent press report.

Bartlesville, Okla.—The Manufacturers' Record is informed that the Bartlesville Interurban Railway Co. is surveying or has made surveys for extensions to either Caney, Kans., or Nowata, Okla.; also for extensions of the city lines, none to be constructed before spring. Joseph J. Curl is president and James E. Hickey engineer.

Cape Charles, Va.—The New York, Philadelphia & Norfolk Railroad, it is reported, contemplates extensive improvements, including some doubletracking, new bridges, etc. J. G. Rodgers is superintendent at Cape Charles City, Va.

Crossville, Tenn.—The Tennessee Timber Co., controlled by New York capitalists, is reported to be surveying for a railroad from Dorton, on the Tennessee Central Railroad, four miles east of Crossville, to Peavine Mountain, seven miles, and grading is to begin as soon as location is completed.

Crowley, La.—C. C. Genung is reported to be making a survey for a railroad from Crowley to Lake Arthur, La., 20 miles. D. B. Howell of Lake Arthur and others of that place are said to be interested.

Cuthbert, Ga.—The Georgia, Florida & Ala-

bama Railway is reported to be pushing work on its extension from Cuthbert to Kimbrough, on the Seaboard Air Line, near Richmond. Two contractors are at work between Kimbrough and Benevolence. Another force is at Cuthbert, and a fourth camp will be near Benevolence; line to be 25 miles long.

Dalhart, Texas.—Charter of the Mountain Valley & Plains Railroad Co. has been approved by the Attorney-General; headquarters at Higgins, Texas. The incorporators are C. S. Harrington, Del W. Harrington, C. M. Kella, W. F. Felton, Ben O. Boyce, E. C. Gray, A. L. Winsett and others.

Dallas, Texas.—Col. B. F. Yoakum, chairman of the Frisco system executive committee, is reported as saying that the plan for the Dallas Union Station is being considered and it will probably be carried out. The plan includes freight terminals. C. M. Case, chief engineer of the Rock Island at Fort Worth, Texas, can probably give information.

Dallas, Texas.—The Gulf, Texas & Western Railroad Co. has been chartered in New Jersey as a holding company for the Gulf, Texas & Western Railway Co. of Texas, which proposes to build a line out of Dallas. Joseph J. Jermyn of Scranton, Pa., a prominent coal operator; George B. Jermyn, president of the Dime Bank of Scranton, and Samuel S. Moore are the incorporators; capital, \$12,500,000. The road is to run from Burr's Ferry, Texas, to Benjamin, Texas, about 500 miles. R. C. Megargel of Megargel & Co., bankers, 5 Nassau St., New York, and others are interested. The Manufacturers' Record is officially informed that the Gulf, Texas & Western Railway has arranged for 50 miles of rails, and that bids for grading should be addressed to John T. Witt, chief engineer, Jacksboro, Texas.

Dardanelle, Ark.—The Manufacturers' Record is informed by Col. C. C. Godman, president of the Dardanelle, Oia & Southern Railway, that it is the intention of the company to build a line this year from Dardanelle to Paris, Ark., about 35 miles. Arrangements are not yet fully made.

Deerfield, Va.—H. W. Walters of Irvine, Pa., representing the Commonwealth Lumber Co., which owns timber lands in Augusta county, Virginia, is reported interested with W. H. Landes, attorney, of Staunton, Va., to form a company to build a railroad 20 miles long from Christians, on the Chesapeake & Ohio, to Deerfield.

Eastland, Texas.—F. J. McDaniel of Dallas, Texas, is reported to have completed survey for a railroad connecting Eastland, Carbon and Rising Star, Texas, to be known as the Eastland, Rising Star & Southern Railway. V. R. Coon of Detroit, Mich., is said to be promoting the plan. Later: A letter to the Manufacturers' Record confirms the foregoing. A press report from Austin says the charter is approved, line to be 27 miles long; capital \$100,000. The incorporators are W. S. Michale, J. L. Alford, James Smith, V. R. Coon, Fred M. Delano, J. L. Carleton, H. S. Warren, G. P. Harris, N. J. Alford and T. A. Williams.

Florence, Ala.—The Sheffield Company, it is reported, contemplates building an extension two miles long to Florence University. J. B. McClary is general manager at Sheffield, Ala.

Floydada, Texas.—Contract is reported let for 12 miles of grading on the Llano Estacado Railroad, and work has begun. The Manufacturers' Record is later informed that the work was started on January 9. Line is to run from Floydada northwest in the direction of Tulla and Plainview to a connection with another line. A press report says that Foster & Palmer have the grading contract from Floydada to Lockney.

Fort Worth, Texas.—Surveys are being made for the improvements proposed by the St. Louis Southwestern Railway at Fort Worth. J. W. Maxwell, general superintendent, is quoted as saying that as soon as surveys are finished construction will be started on the new terminal work to cost about \$500,000.

Galveston, Texas.—The causeway agreement is reported signed by all the railroad companies interested and by the County Judge, insuring the building of a railroad and highway causeway between Galveston Island and the mainland. C. F. W. Felt, chief engineer of the Santa Fe at Galveston, Texas, can probably give information.

Garnett, Ga.—The Savannah Valley Railroad is reported to have laid track two miles south of Sylvania. When finished the line will run from Garnett (otherwise Millhaven) to Egypt, Ga., 35 miles.

Grand Saline, Texas.—The Manufacturers' Record is officially informed that the Texas Short Line, which has just been taken out of a receivership, proposes to extend imme-

diately to Quitman, Texas, and probably soon north through Hopkins or Franklin, Delta and Lamar counties to a point on the Red River, connecting with the survey of the St. Louis & Oklahoma Southern Railway, in which the same controlling interests are concerned. An extension south, possibly to Waco, Texas, has also been considered. John B. Christensen, Commonwealth Trust Bldg., St. Louis, Mo.; the Commonwealth Trust Co. of that city; T. R. Meeks and J. A. Germany of Grand Saline, Texas, are all interested.

Greenville, Mo.—The Manufacturers' Record is officially informed that the Williamsville, Greenville & St. Louis Railway Co., as reported, contemplates an extension from Cascade to Fredericktown, for which survey has been made by W. McBrown of East St. Louis, Ill. No bids have yet been received for construction. Extension will be 23 miles long. Work will be heavy. G. A. Long is general superintendent at Greenville, Mo.

High Point, N. C.—Capt. M. L. Jones of Thomasville, N. C., is reported as saying that the Thomasville, Glen Anna & Pee Dee Railroad, now part of the Carolina Valley Railroad, will be extended to Eldorado, N. C.

Honaker, Va.—W. H. Crockett and associates of Williamsport, Pa.; G. E. Boyd of Honaker and Captain Fugate of Abingdon, Va., will, it is reported, build a standard-gauge railroad along Lewis Creek from Honaker, on the Norfolk & Western. Survey has been made for 18 miles into Buchanan county. If continued nine miles more it would reach the Carolina, Clinchfield & Ohio Railway.

Jackson, Miss.—The New Orleans Great Northern Railroad has completed track to Selgers Switch, about four miles south of Jackson, and is now able to operate work trains into Jackson over the Illinois Central Railroad. N. G. Pearsall of Covington, La., general manager, is reported as saying that surfacing, ballasting and ditching the line for regular service will take about four months more, although a press report intimates that through schedules may be put into effect early in February.

Jacksonville, Fla.—Suwannee Electric Power Co., it is reported, may begin work about February 1 on its proposed railway to connect Jacksonville, Fernandina, Live Oak, Lake City, White Springs, Waycross, Valdosta, Gainesville, Newberry and other points in Florida and Georgia; capital, \$1,000,000; W. B. Owen is president; J. H. Phillips, secretary and treasurer; D. G. Ziegler, general manager and chief engineer; George R. Lynn, vice-president; all of Jacksonville.

Kansas City, Mo.—Final survey is reported made for the Kansas City Southeastern Traction Co., which proposes to build a line from Kansas City to Lone Jack, and those interested are reported as saying that work will soon begin. Charles A. S. Sims of Kansas City is president; J. C. Herring is secretary. Other officers and directors are as previously reported.

Kennett, Mo.—The St. Louis, Kennett & Southeastern Railroad will, it is reported, build an extension to Piggott. R. H. Jones is president at Kennett, Mo.

Kingfisher, Okla.—The franchises, rights of way and other property of the Denver, Kingfisher & Gulf Railway Co. are reported purchased by C. G. Jones of Oklahoma City, Okla.; W. M. Bonson of Dubuque, Iowa, and others. It is to build a line from Oklahoma City northwest through Kingfisher, Kiel and Okeene, Okla., and finally into New Mexico, where the company owns coal lands. Survey is reported made and about two-thirds of the grading from Kingfisher to Okeene is finished. D. K. Cunningham and others of Kingfisher, it is further said, started the plan some time ago.

Lafayette, La.—The Southern Pacific Railway, it is reported, has bought 200 acres of land at Lafayette, and proposes to build terminal tracks thereon, besides shops. A. V. Kellogg is engineer of maintenance of way at Houston, Texas. W. M. Hobbs is general superintendent at New Orleans, La.

Laurel, Miss.—Mr. A. B. Patterson, general manager of the Hattiesburg Traction Co., writes the Manufacturers' Record denying the press report which said that he was interested in a plan to build an electric railway from Laurel to Hattiesburg and possibly to Meridian, Miss. He further says that he has not heard of such a movement.

Laurinburg, N. C.—Reported that a railroad will be built from Laurinburg to Glenboro, about 15 miles, to connect with the Atlantic Coast Line. John F. McNair, A. I. James, James A. Jones, John Blue, J. P. McKee, R. B. Covington and others of Laurinburg are said to be interested.

Meberrin, Va.—The Roper-Jackson Lumber Co. of Norfolk, Va., is reported to be building a railroad from Nutbush, on the Virginia Railway, to its timber lands, six miles.

Mexia, Texas.—Reported that the Houston & Texas Central Railroad will double track its line and lower grades from Mexia to Denison, Texas, Mexia being halfway between Houston and Denison. I. A. Cottingham is engineer at Houston, Texas.

Mount Pleasant, Texas.—Mr. J. V. Moore, secretary of the Mount Pleasant Commercial Club, Mount Pleasant, Texas, advises the Manufacturers' Record that the Paris & Mount Pleasant Railroad Co. was organized on January 12 under his direction; president, R. P. Scott of Paris, Texas; first vice-president, Sam Williams; second vice-president, H. A. Wilson; treasurer, R. J. Murphy. The directors include the officers and J. J. Culbertson, H. P. Mayer and A. N. Rogers of Paris, Texas, and J. V. Moore and C. O. Lide of Mount Pleasant; capital stock \$750,000, subscribed. Ten miles already built out of Mount Pleasant will be used and 40 miles more will be built; work to begin soon.

Muskogee, Okla.—H. S. Moore of Muskogee is reported as saying that the Missouri, Oklahoma & Gulf Railroad has just secured \$3,000,000 to build its extension to Sherman, Texas, within the next year and that a survey has been made from Sherman to Houston to continue the line there. William Kenefick of Kansas City, Mo., is the chief promoter of the road, which is now constructed from Wagoner to Calvin, Okla., over 100 miles.

Oakland, Md.—Reported that the Upper Potomac Coal Co. will begin construction March 1 upon a standard-gauge railroad from Schell Station, on the Western Maryland Railroad, up Laurel Run to coal fields.

Ravenscroft, Tenn.—The Tennessee Northeastern Railroad Co. proposes to build a standard-gauge line from Ravenscroft, on the Nashville, Chattanooga & St. Louis Railway, via Jamestown to a connection with the Queen & Crescent near Winchester Station, in Scott county, about 100 miles. J. W. Cooper has applied to the court at Crossville, Tenn., for \$25,000 of bonds from the county in aid of the railroad.

Robards, Ky.—An official letter to the Manufacturers' Record says that the Southern Coal & Transportation Co. is not immediately contemplating construction of a railway from Robards to Green River, four miles, between which points it has purchased coal lands. J. W. Miller and others are interested.

Salisbury, N. C.—The Piedmont-Carolina Railway Co., it is reported, proposes to build a line in Salisbury from Main street to the Fair Grounds; also to East Spencer, South River, Granite Quarry, Faith, China Grove and Kannapolis. The Southern Power Co. is to furnish the motive power.

San Angelo, Texas.—J. H. Ransom, it is reported, proposes to build a railroad from San Angelo to Kerrville, Texas, connecting with the San Antonio & Aransas Pass Railway.

Shreveport, La.—An officer of the Vicksburg, Shreveport & Pacific Railway writes the Manufacturers' Record denying the press report that the company had let a \$50,000 grading contract in Shreveport and that it would build a new passenger station.

Stamford, Texas.—The Stamford & Northwestern Railroad Co., which proposes to build a line from Stamford to Plainview, Texas, 165 miles, has \$170,000 capital stock. The charter has been approved. Among the incorporators are W. T. Andrews, L. M. Rule, R. V. Colbert, F. S. Hastings, N. Leavitt, R. L. Penick, B. E. Sparks, A. W. Springer and E. A. Swenson, all of Stamford, Texas, and E. P. Swenson of New York, N. Y. Later: An official letter to the Manufacturers' Record says the line will be 170 miles long. P. M. Johnston of St. Elmo, Ill., has the contract for 75 miles out from Stamford. P. G. Burns of Houston, Texas, is chief engineer. Construction is begun. L. M. Rule is president; R. V. Colbert, vice-president; L. B. Peyton, secretary, all of Stamford; S. M. Hudson, treasurer, of Fort Worth, Texas; James Stuart Mackle, assistant secretary and assistant treasurer, and L. E. Katzenbach, transfer agent, both of New York. Directors include the president and vice-president, besides E. P. Swenson of New York; A. W. Springer of Aspermont, Texas; R. L. Penick, F. S. Hastings, B. E. Sparks, N. Leavitt and E. A. Swenson of Stamford, Texas.

St. Joseph, Mo.—The Manufacturers' Record is informed that the Interstate Railroad Co., which proposes to build a line from St. Joseph to Kansas City, expects to let con-

tracts this month. Joseph A. Corby and others are interested.

Temple, Texas.—Max Elser, formerly of Texas, but now of New York city, has, it is reported, planned an interurban electric railway to connect Temple and Waco, Texas, and has applied to the City Council of Temple for a 30-year franchise.

Terrell, Texas.—An officer of the Texas Midland Railroad writes the Manufacturers' Record that the recent bond issue is merely for refunding purposes, and no improvements are contemplated.

Washington, D. C.—Bills have been introduced in Congress by Senator John Walter Smith and Congressman Sydney E. Mudd of Maryland authorizing the extension of the Washington, Spa Springs & Gretna Railway into the District of Columbia along the Bladensburg road to 15th and H streets N. E. Contract is reported let to the Buffalo Contracting Co.

Waskom, Texas.—Official: Survey was made several years ago by the Missouri, Kansas & Texas Railway Co. for a proposed branch from Waskom, Texas, southward, but owing to conditions nothing has been done yet with regard to building; headquarters at Dallas, Texas.

### STREET RAILWAYS

Austin, Texas.—The Austin Electric Co., it is reported, contemplates building a cut-off line. W. J. Jones is president and general manager.

Clarksburg, W. Va.—The Weir Improvement Co., according to a letter received by the Manufacturers' Record, has the privilege of operating street railways; E. T. Weir is president, J. C. Williams vice-president, and D. M. Weir secretary and treasurer.

Dallas, Texas.—An ordinance has been passed authorizing the Dallas Consolidated Electric Street Railway Co. to do some double-tracking.

Galveston, Texas.—The Galveston Electric Co. has applied for the right to build double track as far as the city limits on Broadway and on Avenue R.

Goldsboro, N. C.—An official letter to the Manufacturers' Record says that the Goldsboro Traction Co. was incorporated with \$150,000 authorized capital stock and \$45,000 paid in. About one mile of track is laid, and the company forces will build the road. E. T. Oliver of Raleigh, N. C., is president and general manager; S. L. Blackburn of Richmond, Va., vice-president; J. S. Oliver of Goldsboro, N. C., secretary and treasurer. The board of directors include the officers and J. H. Trent and W. T. Oliver of Logan, W. Va. Line will be two and one-half miles long from the new Union Station to Revilo Park. This is to be in operation by June 1. It will connect the city with East Goldsboro, the residence suburb. J. R. Edwards, civil engineer, of Greensboro, N. C., is in charge of the work.

Hattiesburg, Miss.—Reported that the Hattiesburg Traction Co. will resume construction on its street-car line, negotiations being under way for the financing.

Helena, Ark.—The Helena Street & Interurban Railroad Co. has been incorporated with \$25,000 capital to build a street railway; J. W. Burks, Jr., president; Charles S. Hernly and J. M. Vineyard, secretary and treasurer, are the incorporators.

Wichita Falls, Texas.—Frank Kell and J. A. Kemp of Wichita Falls have been granted a franchise for a street railway. Construction is to begin immediately, and three miles are to be built within six months.

### MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery that is wanted.

Air Compressor.—C. E. Miller, Room 1002, 26 Broadway, New York, wants air compressor of about 300 cubic feet capacity.

Air Compressors.—H. L. Shock, 236 Nostrand Ave., Brooklyn, N. Y., wants high and

low-pressure air compressors, 150-900 cubic feet per minute.

Baling Presses.—J. W. Ashley, Ashley, Miss., wants baling presses.

Barrel Machinery.—Daniel Welsh, Lexington, Va., wants addresses of manufacturers of barrel-heading and stave machinery.

Bending Rolls.—Sanford-Day Iron Works, Knoxville, Tenn., wants set bending rolls for handling steel  $\frac{1}{4}$ -inch thick; width from 5 to 8 inches; to roll to circle from  $3\frac{1}{2}$  inches to 6 inches diameter.

Blacksmith Outfit.—Gardner & Aderholdt, Cherryville, N. C., want blacksmith outfit.

Boiler.—Progressive Investment Co., Marianna, Ark., will want boiler. (See "Cotton Gin.")

Boiler.—Corinth Engine and Boiler Works, Box C, Corinth, Miss., wants 18 or 20-horsepower second-hand return-tubular fire-box boiler; not above 12 feet long over all or over 4 feet wide. Give full description, etc.

Boilers.—Samuel W. Clark, Trinity College, Durham, N. C., wants catalogues and prices on boilers.

Boilers.—United Supply Co., High Point, N. C., wants names and addresses of manufacturers of steam boilers of high and low pressure.

Boilers.—See "Water-works Machinery."

Boilers.—Syleeacau Manufacturing Co., Rock Hill, S. C., wants to correspond with manufacturers of boilers relative to agency.

Boilers.—H. L. Shock, 236 Nostrand Ave., Brooklyn, N. Y., wants locomotive boilers, 50-150 horse-power.

Boilers.—C. E. Miller, Room 1002, 26 Broadway, New York, wants two 80 to 100-horsepower locomotive or economic type boilers.

Bottles.—See "Bottling Plant."

Bottling Equipment.—P. S. Harris, care of Pacific Express Co., Pearsall, Texas, wants soda-water bottling outfit.

Bottling Plant.—W. C. Dillon, general manager Kallum Mineral Wells Co., Lawton, Okla., wants prices on bottling-plant equipment, including mineral-water bottles.

Boring Mill.—Sanford-Day Iron Works, Knoxville, Tenn., wants 36-inch car-wheel boring mill, with chuck and facing attachment; new or second-hand. (Niles preferred.)

Boxes.—See "Electric-battery Supplies."

Brick.—B. E. Grandy & Son, Brunson, S. C., want samples and prices of red pressed brick.

Bridge Construction.—Commissioners' Court of DeWitt county, Cuero, Texas, will receive bids until February 6 for construction of bridge across Guadalupe River near Hochheim, Texas; plans and specifications on file in County Clerk's office at Cuero; Rudolph Kleberg, Jr., County Judge.

Bridge Construction.—Board of Supervisors of Panola County, Batesville, Miss., invites bids until February 1 for building iron bridge over Coldwater River near Askew, Miss., and over Orr Creek, about three miles east of Sardis, Miss.; R. W. Draper, clerk of board.

Bridge Construction.—D. M. Miles, Spartanburg County Supervisor, and others, Spartanburg, S. C., will receive bids and award contracts on following dates for bridge construction: January 22, Marche's bridge, either steel or wood, and one pier; January 23, rebuilding of Burnt Factory bridge, either steel or wood; January 28, McMillin's bridge, either to replace and repair steel structure or build covered wood structure; also on same date for building covered wood bridge at Shoely; February 2, wood bridge at Motlow's Creek; February 4, Brights' bridge over South Tyger River; plans and specifications made known on day of letting; S. M. Bagwell, clerk of Board.

Bridge Construction.—Bids will be opened February 1 for construction of wooden bridge across Okitbeha Creek, on Land Line road, as per plans and specifications on file in Chancery Clerk's office; W. R. Pistole, clerk, Meridian, Miss.

Briquetting Machinery.—Consumers' Lignite Co., Wilson Bldg., Dallas, Texas, wants lignite briquette machinery.

Broom Machinery.—Hill & Jones, Boxwood, Va., want to correspond with manufacturers of broom machinery.

Building Materials.—Wilmarth Building Co., 1170 Broadway, New York, wants prices on cement, sand, brick, granite, marble, iron, roofing and sheet metal, plastering, lumber, mill work, hardware, painting, glazing, plumbing, heating and wiring.

Building Supplies.—W. P. R. Pember, Bristol, Tenn., wants prices on building supplies for \$10,000 frame school building, Plumtree, N. C.

Cannery.—Dodson Canning & Manufacturing Co., Dodson, La., wants prices on canning machinery; daily capacity 5000.

Cannery.—J. W. Pinson, care of Secretary's Office, Construction Headquarters, Gulf, Texas & Western Railway Co., Jacksboro, Texas, wants catalogue and prices on machinery for vegetable and fruit canning factory; plant to cost within \$5000.

Canning Machinery.—Apex Canning Co., Apex, N. C., wants labeling machine, tomato filler and rotary peeling table; also 10-horsepower engine.

Cans and Labels.—J. W. Pinson, care of Secretary's Office, Construction Headquarters, Gulf, Texas & Western Railway Co., Jacksboro, Texas, wants prices on cans and labels for retailing cane syrup.

Cars.—Santa Clara Development Co., Cristobal, C. Z., Panama, wants about 30 gauge cars for handling logs and bananas.

Car Wheels.—Porter & Moore Company, Norfolk, Va., wants prices on three pairs of wheels for three standard-gauge logging cars. (See "Logging Cars.")

Cars.—See "Logging Cars."

Cars.—C. E. Miller, Room 1002, 26 Broadway, New York, wants 10 three or four-yard 36-inch-gauge dump cars.

Cars.—Goldsboro Traction Co., Goldsboro, N. C., will want cars.

Cartridges.—See "Firearms and Ammunition."

Ceiling.—See "Metal Ceiling."

Celluloid.—W. L. Mitchell, 107 Calhoun St., Huntsville, Ala., wants to correspond with manufacturers of transparent celluloid, such as used for buggy apron fronts.

Cement.—Wilmarth Building Co., 1170 Broadway, New York, wants prices on cement. (See "Building Materials.")

Chemicals, etc.—Bids will be received at Treasury Department, Bureau of Engraving and Printing, Washington, D. C., until April 5 to furnish during fiscal year beginning July 1, 1909, supplies of chemicals, etc., lumber and plumbers' supplies, when proposals will also be opened. Blank forms with specifications for proposals and further information furnished on application to Joseph E. Ralph, director of bureau.

Coping.—Washington, D. C.—Sealed proposals will be received until February 16 for coping for municipal building. Information on application to Major Cosby, Executive Officer, Room 212, District Building, Washington, D. C. Certified check for \$100.

Cotton Compress.—J. W. Pinson, care of Secretary's Office, Construction Headquarters, Gulf, Texas & Western Railway Co., Jacksboro, Texas, wants prices on cotton compress to handle about 50,000 bales during season.

Cotton Gin.—J. W. Ashley, Ashley, Miss., wants cotton gin.

Cotton Gin.—Progressive Investment Co., Marianna, Ark., will want prices on cotton-gin machinery, to be installed about September; will also want engine and boiler.

Cotton Gins and Compresses.—Syleeacau Manufacturing Co., Rock Hill, S. C., wants to correspond with manufacturers of Gins and presses relative to agency.

Crusher.—C. H. Graham, Newport, Ark., wants prices on crusher. (See "Mining Machinery.")

Denatured Alcohol.—L. B. Thompson, 1377 Annunciation St., New Orleans, La., wants to correspond with manufacturers of denatured alcohol with view to taking agency.

Die Manufacturers.—John C. Morrison, acting secretary Universal Vending Machine Co., Reidsville, N. C., wants to correspond with die makers relative to placing order for manufacture of vending machines.

Ditching Machinery.—J. Q. Dickinson, 1217 Ionla St., Jacksonville, Fla., wants to let contract for manufacturing power ditching machine; wood and metal construction; operated by gas engine or dynamo; plans and specifications furnished on application.

Ditching Machinery.—Longview Sanitary Co., Longview, Texas, wants to buy trenching machine or excavator.

Drainage.—Commissioners of Gum Ridge Drainage District, Fayette, Miss., will award contracts February 1 for construction of system of canals and levees for the district; work contemplates about 140,000 cubic yards. For further information address C. H. Jenks, consulting and supervising engineer, Fayette, Miss.

Dry Colors, etc.—Bids will be received at Treasury Department, Bureau of Engraving and Printing, Washington, D. C., until March 8 to furnish during fiscal year beginning July 1 dry colors, etc., and rubber goods; bids opened June 1 and May 24, respectively; blank forms, with specifications for proposals, and further information on application to Joseph E. Ralph, director of bureau.

Drying Machines.—Santa Clara Development Co., Cristobal, C. Z., Panama, wants cocoa-drying machines.

Electric-battery Supplies.—St. Louis Storage Battery Co., 2107 Pine St., St. Louis, Mo., wants rubber cells, hardwood boxes, glass jars, chemically-pure lead, and chemicals such as sulphuric acid, lead oxides, etc.; also lead-molding machinery.

Electric Supplies, etc.—Bids will be received at Treasury Department, Bureau of Engraving and Printing, Washington, D. C., until March 22 to furnish during fiscal year beginning July 1, 1909, paper, etc., binders' supplies, electrical supplies and paper boxes; bids to be opened May 17 for paper, etc., and binders' supplies, and on May 15 for electrical supplies and paper boxes; blank forms, with specifications for proposals, and further information furnished on application to Joseph E. Ralph, director of bureau.

Electric Tools.—See "Stone-cutting Tools."

Electrical Equipment.—Samuel W. Clark, Trinity College, Durham, N. C., wants catalogues and prices on electrical equipment.

Electrical Wiring and Fixtures.—See "Heating Apparatus."

Electric-light Plant.—City of Terrell, Texas, E. R. Miller, secretary, will receive bids until about February 10 for construction of electric-light plant, to cost \$15,000; copy of specifications forwarded on application.

Electrical Machinery.—See "Power Plants."

Engine.—Apex Canning Co., Apex, N. C., wants 10-horsepower engine. (See "Canning Machinery.")

Engine.—Progressive Investment Co., Marianna, Ark., will want engine. (See "Cotton Gin.")

Engine Works.—Ernest Turner, Dadeville, Ala., wants bids on manufacture of stationary engines, large and small horse-power, equipped with expansion-valve gear cylinders patented by Mr. Turner.

Engine.—See "Gasoline Engine."

Engines.—Samuel W. Clark, Trinity College, Durham, N. C., wants catalogues and prices on engines.

Engines.—Syleeacau Manufacturing Co., Rock Hill, S. C., wants to correspond with manufacturers of engines relative to agency.

Engineering Specialties.—Douglas Gordon, 165 Naples road, Brookline, Mass., wants to represent manufacturers of engineering specialties; will locate in Great Britain.

Engravers' Supplies, etc.—Bids will be received at Treasury Department, Bureau of Engraving and Printing, Washington, D. C., until February 23 to furnish during fiscal year beginning July 1, 1909, engravers' supplies, textiles, etc., hardware and grocers' sundries; proposals not to be opened until following dates: May 29, May 24, May 26, May 20; blank forms, with specifications for proposals, and further information furnished on application to Joseph E. Ralph, director of bureau.

Evaporating Apparatus.—W. C. Dillon, general manager Kallum Mineral Wells Co., Lawton, Okla., wants prices on equipment for evaporating mineral water for salt collecting.

Extracting Machinery.—See "Wax Machinery."

Filing Cases.—Bids will be opened in office of Auditor for Postoffice Department, Room 521 Postoffice Department Bldg., Washington, D. C., on February 2 for manufacturing from 80 to 184 filing cases, about 5 feet 6 inches long, 5 feet 10 $\frac{1}{2}$  inches high, 1 foot 8 $\frac{1}{2}$  inches deep, each to contain 48 drawers 15 $\frac{1}{2}$  inches wide, 19 $\frac{1}{2}$  inches deep, 4 $\frac{1}{2}$  inches high, above being outside over-all measurements; oak stain and hard-oil finish. Separate proposals are invited for cases without drawers, and for from \$840 to \$640 drawers without cases, of dimensions and finish described above; certified check for 10 per cent. of amount of bid; plans, specifications and further information may be obtained at above office; L. A. Coolidge, assistant secretary.

Firearms and Ammunition.—Fayetteville Independent Light Infantry, C. L. Jones, secretary, Box 207, Fayetteville, N. C., wants No. 45 caliber rifle, or Krag guns; also wants information and prices on 45 caliber steel cartridges by thousand rounds.

Furniture.—Baptist Church, Latta, S. C., wants pulpit furniture for new church. Address W. C. Allen.

Gas-producer Plant.—See "Power Plant."

Gasoline Engine.—F. V. Klinekowitz, Wilna, Md., wants new or second-hand two-horsepower stationary gasoline engine for pumping water.

Handles.—J. W. Jungkurth, 7048 Woodland Ave., Pischall, Philadelphia, Pa., wants addresses of Southern manufacturers of pick, sledge and hammer handles.



**Heating Apparatus.**—Board of Regents, Eastern Kentucky State Normal School, Richmond, Ky., will receive bids until February 17 at office of Anderson & Frankel, architects, Lexington, Ky., for heating and lighting plant and distributing system and heating appliance for University Hall at State Normal School, Richmond; certified check for 2 per cent. of amount of bid; plans and specifications on file at offices of architect or of Eastern Kentucky State Normal School. (See "Schools.")

**Heating Apparatus.**—Wilmarth Building Co., 1170 Broadway, New York, wants prices on heating apparatus. (See "Building Materials.")

**Heating Apparatus.**—Bids will be opened February 15 for heating, plumbing, electrical wiring and fixtures for two sets of field officers' quarters at Fortress Monroe, Va.; Ernest R. Tilton, Constructing Quartermaster. (See "Government and State Buildings.")

**Heating Apparatus.**—Emil Levy, Orange, Va., wants prices on heating apparatus for \$12,000 store building.

**Heating Apparatus.**—Bids will be opened January 25 for installation of heating, ventilating and automatic regulation in two-story-and-basement fireproof school building in Oklahoma City; plans and specifications on file at offices of Layton & Smith, architects, Monte Ne Block, Oklahoma City, or at Board of Education Rooms, India Temple, Oklahoma City; certified check for 5 per cent. amount of bid; Gus A. Elbow, secretary Board of Education.

**Heating Plant.**—Bids will be received at office of E. A. Hobbs, Clerk Berkeley County Court, Martinsburg, W. Va., until January 25 for furnishing and installing direct steam-heating system in remodeled courthouse in accordance with plans and specifications furnished by Milburn, Helster & Co., Home Life Bldg., Washington, D. C., on file in said clerk's office; certified check for 2 per cent., payable to Sheriff of Berkeley county; bids to be addressed to County Court of Berkeley county, Martinsburg, W. Va.

**Hoisting Engine.**—B. E. Grandy & Son, Brunson, S. C., want second-hand hoisting engine. Give prices.

**Hoisting Engines.**—H. L. Shock, 236 Nostand Ave., Brooklyn, N. Y., wants double-drum, double-cylinder, 10x12 hoisting engine.

**Ice-cream Machinery.**—Meridian Traffic Association, Box 386, Meridian, Miss., wants addresses of ice-cream machinery manufacturers. (Machinery for small plant.)

**Iron Posts.**—Borst & Co., 349 Equitable Bldg., Baltimore, Md., want cast-iron lamp-posts.

**Iron.**—Wilmarth Building Co., 1170 Broadway, New York, wants prices on cast and wrought iron. (See "Building Materials.")

**Iron or Steel.**—American Metallic Packing Co., Walnut and Clark Sts., Lexington, Ky., wants 5280 linear feet 1/2x2-inch bar iron or steel for flat rails; even lengths; holes countersunk for 50-penny wire nails; new or second-hand; f. o. b. Lexington.

**Ironworking Machinery and Supplies.**—Samuel W. Clark, Trinity College, Durham, N. C., wants catalogues and prices on ironworking machinery and supplies.

**Labels.**—See "Cans and Labels."

**Lamp Posts.**—See "Iron Posts."

**Lathe.**—Southern Locomotive & Car Manufacturing Co., Valdosta, Ga., wants hollow-spindle, screw-cutting engine lathe, to swing 26 to 40 inches and take 10 feet or more between centers; new or second-hand.

**Lead-molding Machinery.**—St. Louis Storage Battery Co., 2107 Pine St., St. Louis, Mo., wants lead-molding machinery. (See "Electric-battery Supplies.")

**Laundry.**—Robt. L. Barnett, 609 Paul Gale Greenwood Bldg., Norfolk, Va., will open proposals about April 1 on laundry equipment costing about \$10,000. (Laundry at Newport News.)

**Lighting Apparatus.**—See "Heating Apparatus."

**Lighting Plant.**—Marion Clothing Co., Inc., Marion, Va., wants information relative to cheapest and best light for storeroom 65x22 feet, 11 feet high.

**Locomotive.**—W. J. Alford, 3521 27th St., North Birmingham, Station Birmingham, Ala., wants 30 to 40-ton locomotive.

**Locomotive.**—American Metallic Packing Co., Lexington, Ky., wants 30 or 35-ton 26-inch-gauge Climax geared No. 1 second-hand locomotive. Give description, cut, etc., f. o. b. Lexington.

**Locomotives.**—Santa Clara Development Co., Cristobal, C. Z., Panama, wants two locomotives.

**Locomotive.**—C. E. Miller, Room 1002, 26 Broadway, New York, wants 26-inch-gauge 12-ton saddle-tank locomotive.

**Logging Cars.**—W. J. Alford, 3521 27th St., North Birmingham, Station Birmingham, Ala., wants new or second-hand logging cars.

**Logging Cars.**—Porter & Moore Company, Norfolk, Va., will buy three standard-gauge second-hand logging cars or three pair of wheels for same.

**Logging Machinery.**—Santa Clara Development Co., Cristobal, C. Z., Panama, wants logging machinery.

**Marble and Granite.**—Wilmarth Building Co., 1170 Broadway, New York, wants prices on marble and granite. (See "Building Materials.")

**Machine Tools.**—W. J. Alford, 3521 27th St., North Birmingham, Station Birmingham, Ala., wants 10 to 12-foot boring mill and four to five-foot-arm radial drill; both second-hand.

**Machine Works.**—See "Ditching Machinery."

**Merry-Go-Round Equipment.**—C. W. Boone Company, 7 Clay St., Baltimore, Md., wants catalogues and prices on merry-go-round parts (horses a specialty) for shipment to West Indies. Give export discount, with prices f. o. b. Baltimore and New York.

**Metal Ceiling.**—E. G. Peters, Rome, Ga., wants prices on about 38.5 squares steel ceiling, exclusive of cove.

**Milking Machinery.**—Richard Weininger, 7 Andreasgasse 3, Vienna, Austria, wants American cow-milking machinery.

**Mill Supplies.**—Sylecanu Manufacturing Co., Rock Hill, S. C., wants to correspond with manufacturers of mill supplies relative to agency.

**Mill Supplies.**—W. B. Brice, Box 22, Wallace, N. C., wants to buy mill supplies.

**Milling Machine.**—American Metallic Packing Co., Walnut and Clark Sts., Lexington, Ky., wants medium-sized second-hand Universal milling machine; send description, cut, etc.

**Mining Machinery.**—Santa Clara Development Co., Cristobal, C. Z., Panama, wants coal-mining machinery and machinery for developing cement-rock deposit and porcelain clay.

**Mining Machinery.**—C. H. Graham, Newport, Ark., wants prices on machinery for gold and silver mining, including crusher.

**Miscellaneous Supplies.**—Bids will be received at office of General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until February 8 for furnishing wire screening, condenser tubes, cylinder cocks, coupler pockets, manganese steel, switchboard and electrical attachments, etc. Blanks and general information relating to Circular No. 490 obtainable from above office or offices of assistant purchasing agents, 24 State street, New York; Custom-house, New Orleans, La.; and 1086 North Point street, San Francisco, Cal.; also from U. S. Engineer offices in following cities: Seattle, Wash.; Los Angeles, Cal.; Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, Chicago, St. Louis, Detroit, Milwaukee, St. Paul, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City; Chamber of Commerce, Quincy, Ill.; and Chamber of Commerce and Board of Trade, Tacoma, Wash.; F. C. Boggs, Captain, Corps of Engineers, U. S. A., General Purchasing Officer.

**Oils, etc., and Dextrine.**—Bids will be received at Treasury Department, Bureau of Engraving and Printing, Washington, D. C., until February 12 to furnish during fiscal year beginning July 1, 1909, oils, etc., and dextrine; proposals not to be opened until May 26 and May 27, respectively. Blank forms with specifications for proposals and further information furnished on application to Joseph E. Ralph, director of bureau.

**Paving.**—Bids will be received at office of M. Halphen, Mayor, Opelousas, La., until January 27 for construction of about 35,000 square feet cement sidewalks and about 7000 linear feet brick curbing; certified check for \$250; plans and specifications can be obtained from M. Halphen, Mayor, or J. J. Naff, acting City Engineer.

**Paving Blocks.**—Streets and lanes committee will receive bids at office of Harry Wilkin, director of public works, Savannah, Ga., until February 15 for furnishing city with 5000 square yards of granite paving blocks, delivered f. o. b. Savannah. Specifications and proposals furnished on application at above office.

**Paving Materials, etc.**—Board of Control, Norfolk, Va., will receive until January 22 proposals for supplying granite curb and corners, granite block, terra-cotta pipe, drain tiles, Portland cement, lumber and iron castings. Information as to terms, quantities, &c., will be found on bulletin-board at main entrance to Market Building.

**Pipe and Fittings.**—Borst & Co., 349 Equitable Bldg., Baltimore, Md., want wrought-iron piping, pipefittings, valves, etc.

**Pipe Organ.**—Baptist Church, Latta, S. C., wants prices on pipe organ. Address W. C. Allen.

**Piping.**—See "Water-works Machinery."

**Piping.**—See "Paving Materials, etc."

**Piping.**—Eldorado Light & Water Co., Eldorado, Ark., will let contract about February 1 for laying about four miles 4-inch to 10-inch mains; correspondence with contractors desired; J. P. Holmes, president.

**Piping.**—United Supply Co., High Point, N. C., wants names and addresses of manufacturers of iron steam piping.

**Piping.**—W. P. R. Pember, Bristol, Tenn., wants prices on cast-iron two to six-inch pipe.

**Piping.**—E. E. Thompson, Mayor, Kaufman, Texas, wants prices on 8 or 10 carloads four-inch cast pipe and one or more cars six-inch standard S. H. soil pipe.

**Planer and Molder.**—Gardner & Aderholdt, Cherryville, N. C., want second-hand double-surface planer; with molder attachment preferred.

**Plumbing.**—See "Heating Apparatus."

**Pneumatic Tools.**—See "Stone-cutting Tools."

**Power Hammer.**—Sanford-Day Iron Works, Knoxville, Tenn., wants 350-pound Beaudry power blacksmith hammer.

**Power Plant.**—Lebanon Woolen Mills, H. H. Freeman, manager, Lebanon, Tenn., wants electric, steam or gas-producer plant for mill.

**Pumps.**—See "Water-works Machinery."

**Pumps.**—W. C. Dillon, general manager Kallum Mineral Wells Co., Lawton, Okla., wants prices on pumps for mineral-water wells.

**Rails.**—W. J. Alford, 3521 27th St., North Birmingham, Station Birmingham, Ala., wants four miles 30-pound and 40-pound relaying rails, and 3000 tons 60-pound relaying rails.

**Rails.**—C. E. Miller, Room 1002, 26 Broadway, New York, wants three miles relaying rails, 35 or 40 pound per yard.

**Rails, etc.**—American Metallic Packing Co., Walnut and Clark Sts., Lexington, Ky., wants several miles No. 1 second-hand 30 or 35-pound steel railroad rails and angle splices f. o. b. Lexington.

**Railway Cars.**—John B. Christensen, Commonwealth Trust Bldg., St. Louis, Mo., in market for 40 coal cars, 6 box cars, one private car and two coaches.

**Rails.**—Santa Clara Development Co., Cristobal, C. Z., Panama, wants about 10 miles light tramway 20-pound rails.

**Road Machinery.**—U. S. Steam Stump-Pulling & Manufacturing Co., Gordon, Ala., wants to correspond with manufacturers of road machinery, including graders, wheel and drag scrapers, etc.

**Road Rollers.**—John G. Duncan Company, Box 506, Knoxville, Tenn., wants dealers' prices on 5, 8, 10-ton second-hand road rollers; immediate shipment. Give description and location.

**Roofing.**—See "Building Materials."

**Sawmill.**—Indianapolis National Supply Co., 320 Board of Trade Bldg., Indianapolis, Ind., wants bids on band or circular sawmill with 20,000 feet daily capacity.

**Sash Clamp.**—Frank Wright, Cave Springs, Ga., wants second-hand sash clamp.

**Saw.**—Frank Wright, Cave Springs, Ga., wants second-hand small band saw.

**Saw.**—Southern Wood Preserving Co., Atlanta, Ga., wants gang saw that will cut 7 to 10 paving blocks out of 3x8 or 4x9 timber; adjustable to cut blocks 3 3/4 or 4 inches.

**Saw.**—Gardner & Aderholdt, Cherryville, N. C., want band resaw.

**Sawmill.**—W. J. Alford, 3521 27th St., North Birmingham, Station Birmingham, Ala., wants new or second-hand sawmill equipment.

**Seating.**—E. Boeringer, manager Columbia Theater, Baton Rouge, La., wants about 500 opera chairs.

**Sewer Construction Materials.**—Longview Sanitary Co., Longview, Texas, wants sewer pipe, sand, gravel, brick, manhole castings, etc., for sewer construction.

**Sewer Construction.**—J. J. Hayes, Mayor, and Aldermen, Vicksburg, Miss., will open bids February 1 for construction of storm sewer on Clay street in accordance with plans and specifications on file in City Engineer's office.

**Sewer Work.**—Baltimore (Md.) Board of Awards will receive bids at office of J. Sewell Thomas, City Register, City Hall, until February 3 for constructing water tanks and tower, sanitary contract No. 27, at sewage disposal works on Back River as shown on plans on file in office of Calvin W. Hendrick, chief engineer of Sewerage

Commission. Specifications and plans can be obtained on application at office of Sewerage Commission, 904 American Bldg. Charge of \$2.50 will be made for each specification, with blueprint; certified check for \$1000; Peter Leary, Jr., chairman of Sewerage Commission; Harry W. Rodgers, secretary.

**Sewer System, etc.**—Treasury Department, office of Supervising Architect, Washington, D. C. Sealed proposals will be received until February 10 for separation of soil and waste lines from storm-water system at United States custom-house, Baltimore, Md., in accordance with drawing and specification, copies of which may be had at above office or of custodian of building; James Knox Taylor, supervising architect.

**Sheet Metal.**—See "Building Material."

**Steam Plant.**—See "Power Plant."

**Steel.**—See "Iron."

**Steel Beams.**—E. G. Peters, Rome, Ga., wants prices on steel I beams, 12-inch double, 80 pounds to foot, 29 feet in length.

**Stone-cutting Tools.**—Owen Bros. Marble Co., Greenwood, S. C., will want pneumatic or electric tools for cutting and working all kinds of stone.

**Sugar Mills.**—Santa Clara Development Co., Cristobal, C. Z., Panama, wants sugar-cane mills.

**Tanks.**—H. V. Lindsey, care of DuPont Company, Wilmington, Del., wants to correspond with manufacturers of cedar or cypress tanks.

**Terra-cotta Pipe.**—P. A. Agelasto, care of Agelasto & Miller, Box 246, Norfolk, Va., wants names of manufacturers of terra-cotta pipe; 3 1/2 feet diameter.

**Valves.**—Borst & Co., 349 Equitable Bldg., Baltimore, Md., want valves.

**Ventilators.**—John A. McCormack, 84 Ashley Ave., Charleston, S. C., wants galvanized-iron globe ventilators and galvanized-iron finish.

**Water-wheel.**—E. E. Thompson, Mayor, Kaufman, Texas, wants prices on water-wheel to produce 10 horse-power (water head 16 feet).

**Water-works.**—City Council, Hugo, Okla., will receive bids until February 2 at office of W. T. Echols, City Clerk, to furnish materials, tools and labor for construction of water-works, according to plans and specifications on file with City Clerk and with Hiram Phillips, consulting engineer, St. Louis, Mo. Work as follows: Brick powerhouse; 3,000,000-gallon concrete reservoir; two 150-horse-power tubular boilers; two 2,000,000-gallon pumps; two 800 cubic-foot air compressors; 4185 feet 14-inch cast-iron pipe; 1790 feet 12-inch cast-iron pipe; 1610 feet 10-inch cast-iron pipe; 5510 feet 8-inch cast-iron pipe; 55,485 feet 6-inch cast-iron pipe; 14,365 feet 4-inch cast-iron pipe; 135 fire hydrants; two 14-inch valves; one 12-inch valve; one 10-inch valve; seven 8-inch valves; 45 6-inch valves; 22 4-inch valves; 700 water meters; material for 700 house connections. Bids to be made on blank forms furnished by City Clerk on application; set of blueprints and specifications will be furnished by Council upon receipt of \$3; deposit of 5 per cent. of amount to accompany each bid; W. L. Gibbs, acting Mayor.

**Water-works Machinery.**—Mayor of Anadarko, Okla., will receive bids to be opened February 1 for purchase of two triplex pumps, two return tubular boilers, cast-iron water pipe, hydrants and valves, sewer pipe and fittings, flush tanks and manhole covers. Specifications and requirements can be obtained from O'Neil Engineering Co., Dallas, Texas.

**Water-works Supplies.**—Baltimore (Md.) Board of Awards will receive bids at office of J. Sewell Thomas, City Register, City Hall, until January 27 for furnishing and delivering to Water Board such service extension and valve boxes as may be required for year ending December 31; contractors to obtain from Alfred M. Quick, Water Engineer, detailed schedules of material on which prices are wanted and indicate in proposal schedule on which they propose to bid. Each proposal to be accompanied by certified check for one-tenth of value of bid if for less than \$500, and \$500 where value of bid is \$500 or more.

**Wax Machinery.**—R. R. Ogden, Bartlett, Texas, wants to correspond with manufacturers of machinery to extract wax from tropical plant having long leafless stems exuding sap, which, when boiled, forms wax; machinery to handle 100 to 500 tons daily.

**Well-drilling Machinery.**—C. R. Smith, Barrett, Ga., wants well augur.

**Wire Baskets.**—Vivian H. Marshall, 612 Van Antwerp Bldg., Mobile, Ala., wants to correspond with sellers of wire baskets or trays.

Wiring.—See "Building Materials."

Wood-pulp Machinery.—M. C. McDonald, West End, N. C., wants information and prices on machinery for making wood pulp (gum and poplar wood, etc.)

Woodworking Machinery.—Fender Lumber Co., Valdosta, Ga., will want planers and molders.

Woodworking Machinery.—W. J. Alford,

3521 27th St., North Birmingham, Station Birmingham, Ala., wants universal saw bench and new or second-hand small band saw.

Woodworking Machinery.—See "Barrel Machinery."

Woolen-mill Machinery.—Lebanon Woolen Mills, H. M. Freeman, manager, Lebanon, Tenn., wants two or three-set mill for manufacturing woolen blankets.

## INDUSTRIAL NEWS OF INTEREST

### Wm. H. Dyer Appointed.

The Southern Locomotive & Car Manufacturing Co., Valdosta, Ga., has appointed Wm. H. Dyer master mechanic of its shop.

### Manufacturing Plant for Sale.

The Shelbyville (Ill.) Machinery Co. plant is offered for sale, and sealed bids will be received until February 1. Walter C. Lindley, trustee, Danville, Ill., can give full particulars.

### Demand for Newton Cupolas.

The Northern Engineering Works, Detroit, Mich., has sold to the Rackingham (N. C.) Foundry & Machine Co. a five-ton Newton cupola and other equipment, and to the Cadillac (Mich.) Machine Co. a No. 42 Newton cupola.

### Opportunity for a Printer.

A printer capable of managing a job printing office is offered a permanent position provided he is prepared to invest \$3000 or more in an established plant. It is stated the enterprise is now profitable. Address Box 565, Wilmington, N. C.

### Large Tonnage of Structural Steel.

The Wm. B. Seafie & Sons Company, Pittsburgh, Pa., has received from Spang, Chalfant & Co. contract for a large tonnage of structural steel work in connection with the extensive additions which are being made to the firm's tube plant at Etna, Pa.

### Johnck & Putnam, Architects.

Announcement is made that Frederick Johnck and J. Louis Putnam have established the firm of Johnck & Putnam at 216½ North 21st St., Birmingham, Ala. Mr. Johnck was formerly chief draughtsman in the office of Charles E. Birge, New York city, and Mr. Putnam comes from the office of Carpenter, Blair & Gould, New York city.

### Wants Machinery Salesman.

A Western company engaged in contracting engineering wants to engage a machinery salesman. It is desirous of considering men with experience in selling equipment in the power-plant field and with a record of sales to big industrial establishments, consulting engineers and architects. Address No. 396, care of Manufacturers' Record.

### Milburn, Helster & Co., Architects.

Frank P. Milburn & Co., architects, Home Life Bldg., Washington, D. C., announce that their title has been changed to Milburn, Helster & Co. This action enables Michael Helster to be more publicly identified with the firm with which he has been connected for some years in the preparation of plans and specifications for buildings of all kinds throughout the South.

### Stephens-Adamson Manufacturing Company.

The Stephens-Adamson Manufacturing Co., engineer, founder and machinist, offering elevating, conveying and power-transmitting machinery, Aurora, Ill., announces the removal of its New York offices to the new Hudson Terminal Building at 50 Church street. Frank McWethy, who has been in charge at New York for several years, will return to Aurora to be assistant sales manager, and William Reinecke, who was connected with the Robins Conveyor Belt Co., will succeed him as manager of the New York office.

### From Cyclone Drill Co.

The Cyclone Drill Co., Orrville, Ohio, has in past years secured a large portion of its business at Chicago from mining properties in the North and West. Its trade has grown to such an extent that it was recently decided to open an office in Chicago to take care of that trade to better advantage. J. F. Munn, who has had charge of the core drill department at the factory for several years, will take charge of the Chicago office. He has had a broad experience in drill work, covering both core and churn drilling, and his experience will be valuable to buyers of prospecting machinery. R. R. Sanderson will succeed Mr. Munn at the Orrville office.

The Chicago address after February 1 will be 419 Fisher Building.

### J. B. Weems, Chemist.

Manufacturers, firms and others who may need the services of a consulting and analytical chemist are invited to correspond with J. B. Weems, Ph.D., Crewe, Va. Dr. Weems was for 10 years chemist at the experiment station of Iowa, having been there while Secretary Wilson was the director. He is confident he can give the best results to those desiring expert work in agricultural, engineering and sanitary chemistry, having had large experience in practical work in these lines, besides having done much research work. He has an experiment farm of 200 acres and a laboratory, with library, to enable him to give thorough attention to any experiment or any problem in research.

### The Sydnor Pump & Well Co.

Last week the Manufacturers' Record referred to the contract which the Sydnor Pump & Well Co. of Richmond, Va., had completed last summer at Pine Plains, N. Y. The amount named was erroneous, as the contract involved only between \$22,000 and \$25,000. The contract called for a water-works system for the United States Army, and it was completed in the brief time specified (between May 28 and June 14), while other contractors claimed it could not be accomplished in that time. The Sydnor Pump & Well Co. states that the wells it has drilled at Jacksonville, Fla., include a number ranging from 700 to 1000 feet deep, with flows of from 1500 to 3300 gallons per minute.

### Bonner & Barnewall Furnish the Belting.

One of the new cotton mills established in the South during 1908 was the Wymojo Yarn Mills of Woodruff, S. C., a modern plant of 15,000 spindles for manufacturing yarns. As a basis for the power transmission the company is using electricity furnished by the Southern Power Co., main offices at Charlotte, N. C. Considerable belting is used, and the contract for this part of the equipment was awarded to Bonner & Barnewall, 111 Hudson St., New York. This firm (incorporated) manufactures pure oak tanned leather belting, hydraulic pump and lace leathers, belt cement and belt dressing, and its belting was selected as most suitable for the Wymojo plant, the contract being awarded more or less unsolicited.

### Independent Pneumatic Tool Co.

The Independent Pneumatic Tool Co., First National Bank Bldg., Chicago, Ill., has held its annual meeting, and the enterprise was shown to be in excellent financial condition. During the quarter ending December 31 the company's volume of trade was 40 per cent. more than for the corresponding period of 1907, and it is probable that the year 1909 will give the company a larger trade than any of its previous years. The company's products include the Thor piston air drills, pneumatic riveting machines, caking and bending hammers, saws, motors, etc. At the annual meeting James S. Brady of New York was elected president, W. O. Jacquette of New York first vice-president, John D. Hurley, Chicago, second vice-president, and A. B. Holmes, Chicago, secretary-treasurer.

### Carborundum Extensions.

The Carborundum Company, manufacturer of Carborundum, is to increase its already extensive plant at Niagara Falls, with the addition of a four-story brick and steel structure and the consequent increasing of output and working force. The new building is to be 25x90 feet. One floor is to be used in the manufacture of carborundum sharpening stones, hones, scythe stones and other specialties. The growth of this branch has been phenomenal, and now carborundum sharpening stones can be found in almost every hardware store. The other floors will be used for mixing and wheel-molding departments and for storage. During the past year the Carborundum Company has added several new lines to its manufactured products. These include garnet paper and cloth,

used largely in the wood and furniture trade, and emery paper and cloth, used in finishing metal and machinery parts.

### Quality vs. Quantity in Advertising.

The man who pays for advertising space usually has but little experience in advertising and frequently bases any contract he may award on the quantity of circulation. He will ask what is the circulation of a paper, and unless the figures run into many thousands he is not impressed. But the question of quality rather than quantity is one which should be given its proper consideration when arranging to advertise in newspapers and other publications. It is true the number of readers of a newspaper signifies much to the advertiser, but it can scarcely be doubted that the character of those readers signifies much more. A circulation of 1000 copies will often bring decidedly better results to the advertiser, because the readers are just the class of people before whom he wants to place his proposition, than another publication going to 10 or 50 times as many persons. This question of judging advertising mediums is one which E. St. Elmo Lewis has considered carefully, and his opinions on the subject were presented recently in The Office Outfitter. This article contains data of interest to all who advertise. Mr. Lewis is well known as the advertising manager of the Burroughs Adding Machine Co., Detroit, Mich.

### An Improved Stop Cock.

The Kelly & Jones Company, Greensburg, Pa., has patented a universal stop and waste cock. Up to the introduction of this universal waste and stop cock the plumber has been obliged to carry a rather assorted stock of different kinds and styles of cocks. From now on a decided reduction can be made in this class of stock, due to the universality of this new cock. It can be used anywhere, indoors or in the curb box, for any purpose, either right or left, by any plumber or pipe-fitter, experienced or inexperienced. The cock, not varying materially from standard high-grade stop and waste cock in valve construction, differs considerably as pertains to the handle or operating mechanism. This is accomplished by employing a lever handle of such construction and material as to be easily broken at a point which, when broken, leaves the regular tee handle. It can therefore be used either with a tee or lever handle. Its adaptability for use as a right or left cock is accomplished by the instant removal and changing of the handle from right to left, and vice versa when the cock is open. A setscrew firmly engages the handle to the body, when desired unremovable, thus obviating any danger of same becoming detached. The drain outlet is threaded ready for the connection of the drainpipe. It is made for iron or brass pipe in standard sizes from one-half inch to two inches.

### Safety Blasting Explosives.

Operators in the mining regions of the world fully realize the necessity for improving mine conditions so that the possibilities of explosions damaging to men or property may be lessened. Various conditions and machinery in American mines have caused disastrous explosions, emphasizing the need for safety blasting explosives. The best-known manufacturers of explosives have realized this necessity and have given careful attention to the subject. The E. I. du Pont de Nemours Powder Co. of Wilmington, Del., has been especially prominent in the introduction of improved explosives, and is now distributing an interesting and timely publication entitled "Safety Blasting Explosives." This book contains data that should be read by every mine owner or manager. The company introduced nyalite, a powder that could be used in gaseous or dusty coal mines with more safety than explosives heretofore offered. But with the introduction of nyalite the company's study of safety explosives had only begun, and its experiments since have resulted in the production of carbonite, which is now offered as being the safest and best explosive to use in mines which are gaseous or dusty. Carbonite contains nitro-glycerin, but it contains other ingredients also which not only reduce its length and duration of flame, but also lower the rate or velocity of detonation, heat of detonation and temperature of detonation. All of these features enter into the problem of manufacturing safety explosives.

### "Wireduct"—The New Conduit.

"Wireduct" is a new non-metallic flexible conduit manufactured by the American Conduit Manufacturing Co., Keystone Bldg., Pittsburgh, Pa. It is different from and claimed to be superior to any flexible conduit heretofore invented. The company says:

"Comparison by actual test of all important essentials is conclusive. The inner tube of this conduit cannot be pulled out, and it will not collapse under any circumstances. Extreme torsion and severe abuse have no effect upon the tube. The bond between the middle tube and the fiber center of the conduit is so perfect that the two are literally one. This feature is absolutely new and eliminates a serious fault in conduits. The fiber heretofore mentioned comprising the body of 'Wireduct' is a special compound possessing great elasticity and tensile strength. It is at the same time of such a character as to readily blend with the other elements of the tube. The tube is encased in an envelope of material which resembles the skin of the alligator in toughness and pliability, and which will not deteriorate, but will retain its toughness and pliability for years. It may be said that the missing link has been found for conduits and that the long-sought-for element which will render flexible tubing always pliable and ready for use after long storage has at last been incorporated in a conduit. Nothing like this conduit with respect to durability, combined with flexibility, fire-resisting and water-proof qualities, has ever been produced. We know it cannot be duplicated by the use of any of the compounds in common use. It is unique. Patents are pending. Descriptive bulletin will be sent upon application."

### American Blower-Sirocco Consolidation.

One of the most important consolidations effected recently was announced during the week. It is the consolidation of the American Blower Co. of Detroit and the Sirocco Engineering Co. of New York. Since their first appearance on the British market and their introduction on the American market in 1903 the Sirocco fans have advanced steadily in popularity. The distinguishing features of the Sirocco fan are in its blast wheel or runner. This is of drum form with a large inlet chamber enclosed by numerous blades, which are very long but narrow, and are curved forward. Instead of having 16 blades it usually has 64. Instead of the blades being about the same length and width, they are usually six to nine times as long as they are wide. Instead of being flat or backward curved they are forward curved. These changes are radical and result in superior efficiency and permit of installations otherwise difficult or not practical. The Sirocco fans were invented by S. C. Davidson of Belfast, Ireland, who was for many years a grower of tea in India. His fan inventions followed his design and introduction of apparatus operated by a naturally induced draft of pure hot air for drying tea. In 1897 Mr. Davidson invented this radically new type of centrifugal fan. The American Blower Co. will offer Sirocco and A B C fans. It will continue its principal offices at Detroit, Mich., and works at Detroit and Troy, N. Y., and have branch offices at 141 Broadway, New York, and in Chicago and London. The company's officers are: President, James Inglis, who has heretofore held this office with the American Blower Co.; vice-president, William C. Redfield, who was president of the Sirocco Engineering Co.; treasurer, Charles H. Gifford, who was until about a year ago general manager of the B. F. Sturtevant Company; secretary, Mr. Still, known among engineers as chief engineer of the American Blower Company.

### TRADE LITERATURE.

#### The New St. Charles.

The New St. Charles Hotel, New Orleans, La., is distributing an interesting folder which presents briefly and comprehensively interesting facts regarding New Orleans, that quaint and historic city of the South. Accompanying the leaflet is a vest-pocket memorandum book containing data relative to New Orleans and some other handy facts to which people frequently find it necessary to refer. Andrew R. Blakely & Co., are the proprietors of the New St. Charles Hotel.

#### The Dulany Art and Furniture Department.

The Dulany art and furniture department is shown in general photographic views contained in a pamphlet now being distributed. The views include fine specimens of furnished offices, suitable for directors, presidents, general managers and superintendents. This department of the Dulany Company was established four years ago, and it has rapidly grown to its present extensive proportions under careful selection of furniture and competent management in placing equipments. The company also has a modern printing plant, and its efficiency in

[Continued on Page 67.]



# PROPOSALS INVITED FOR CONSTRUCTION WORK.

Details regarding construction work, proposals invited, etc., noted in the following list, will be found in this and recent issues of the MANUFACTURERS' RECORD and the DAILY BULLETIN OF THE MANUFACTURERS' RECORD.

This list includes only items containing specifications for bids. Many additional opportunities for construction and machinery contracts can be noted in the Construction Department.

\* Indicates that the item has appeared in our "Machinery, Proposals and Supplies Wanted" department.

Date to open bids.  
(When date is  
not given it has  
not been fixed.)

## BRIDGES, CULVERTS, VIADUCTS.

Date to open bids.	Project	Date to open bids.	Project
Jan.	Mena, Ark.	Oct. 17	Oct. 22
Jan. 22	*Concrete Steel Bridge, Takoma Park, Md.	Oct. 29	Nov. 5
Jan. 22	*Six Steel Bridges, Abbeville, S. C.	Nov. 5	Nov. 12
Jan. 22	*Culverts, Barton Heights, Va.	Dec. 1	Dec. 3
Feb. 1	Concrete Viaduct, Houston, Texas.	Dec. 7	Dec. 10
Feb. 2	Five Bridges, Dallas, Texas.	Dec. 15	Dec. 17
Feb. 6	*Six Bridges, Paris, Ark.	Dec. 19	Dec. 24
Feb. 1	*Steel Bridge, Madison, Va.	Jan. 9	Jan. 14
Feb. 1	*Steel Bridge, Madison, Va.	Jan. 13	Jan. 14
Feb. 1	*Iron Bridge, Batesville, Miss.	Jan. 15	Jan. 21
Feb. 2	*Bridges, Spartanburg, S. C.	Jan. 15	Jan. 21
Feb. 6	*River Bridge, Cuero, Texas.	Jan. 16	Jan. 21
Feb. 1	*Wooden Bridge, Meridian, Miss.	Jan. 18	Jan. 21

## ELECTRIC LIGHT AND POWER PLANTS.

Date to open bids.	Project	Date to open bids.	Project
Jan. 22	*Bristol, Tenn.	Nov. 2	Nov. 5
Jan. 22	Chillicothe, Mo.	Dec. 4	Dec. 10
Jan. 22	*Norcross, Ga.	Dec. 7	Dec. 10
Jan. 22	*Water-power-electric Development, White Spring, Fla.	Dec. 8	Dec. 10
Jan. 22	*Bradshaw Cooperage Co., Burkeville, Va.	Jan. 6	Jan. 14
Jan. 22	*City of Kiowa, Okla.	Jan. 12	Jan. 14
Jan. 22	*City of Terrell, Texas.	Jan. 12	Jan. 14
Jan. 22	*Municipal Plant, Terrell, Texas.	Jan. 19	Jan. 21

## MISCELLANEOUS CONSTRUCTION WORK.

Date to open bids.	Project	Date to open bids.	Project
Jan. 22	*Levee Work, Waco, Texas.	Nov. 13	Nov. 19
Jan. 22	Wharves, New Orleans, La.	Dec. 5	Dec. 10
Jan. 22	*Heating Plant, Sumter, S. C.	Dec. 8	Dec. 10
Jan. 30	*Drainage Ditches, Velasco, Texas	Jan. 6	Jan. 14
Feb. 1	*Drainage System, Fayette, Miss.	Jan. 15	Jan. 21

## ROAD AND STREET IMPROVEMENTS.

Date to open bids.	Project	Date to open bids.	Project
Feb. 1	*Vitrified Brick, etc., Ashland, Ky.	Oct. 30	Nov. 5
Feb. 1	Vitrified Brick, Ada, Okla.	Dec. 7	Dec. 10
Feb. 1	Macadam Roads, Durham, N. C.	Dec. 10	Dec. 17
Feb. 1	Brick Paving, etc., Clinton, Mo.	Dec. 11	Dec. 17
Feb. 1	Boulevard, Anniston, Ala.	Dec. 17	Dec. 24
Jan. 25	*Macadamizing, Chatham, Va.	Jan. 8	Jan. 14
Jan. 25	*Macadamizing, Annapolis, Md.	Jan. 12	Jan. 14
Jan. 29	Street Improvements, St. Louis, Mo.	Jan. 15	Jan. 21
Jan. 29	Asphalt, etc., Dallas, Texas.	Jan. 16	Jan. 21
Jan. 27	*Cement Sidewalks, Opelousas, La.	Jan. 19	Jan. 21

## SEWER CONSTRUCTION.

Date to open bids.	Project	Date to open bids.	Project
Jan. 22	*Sanitary Sewers, Winston, N. C.	Sept. 19	Sept. 24
Jan. 22	*Drainage, etc., San Antonio, Texas.	Oct. 23	Oct. 29
Jan. 22	Sewer System Surveys, Clinton, S. C.	Dec. 8	Dec. 10
Jan. 22	Sewers, Park, Tenn.	Dec. 11	Dec. 17
Jan. 22	Sanitary Sewer, Oklahoma City, Okla.	Dec. 18	Dec. 24
Jan. 22	District Sewers, Park, Tenn.	Dec. 21	Dec. 24
Mar.	Storm Drainage, Mobile, Ala.	Dec. 24	Dec. 31
Feb. 25	*Sanitary System, Purcell, Okla.	Jan. 6	Jan. 14
Jan. 22	*Outfall Sewer, part of Comprehensive System heretofore noted; Louisville, Ky.	Jan. 7	Jan. 14
Feb. 3	*Tanks and Tower, Baltimore, Md.	Jan. 19	Jan. 21
Feb. 1	Municipal System, Clearwater, Fla.	Jan. 19	Jan. 21
Feb. 1	*Storm Sewer, Vicksburg, Miss.	Jan. 20	Jan. 21

## WATER-WORKS.

Date to open bids.	Project	Date to open bids.	Project
Feb. 1	*System, Marceline, Mo.	Sept. 21	Sept. 24
Feb. 1	*Municipal System, Uniontown, Ky.	Nov. 19	Nov. 26
Feb. 1	Municipal System, Osceola, Ark.	Dec. 4	Dec. 10
Feb. 1	Municipal System, Seymour, Texas.	Dec. 7	Dec. 10
Jan. 25	Water Mains, Huntsville, Ala.	Dec. 8	Dec. 10
Feb. 2	*Municipal Plant, Daytona, Fla.	Dec. 29	Dec. 31
Feb. 2	*City of Kiowa, Okla.	Jan. 12	Jan. 14
Feb. 1	*Municipal System, Hugo, Okla.	Jan. 16	Jan. 21
Feb. 1	*Pipelining, Eldorado, Ark.	Jan. 18	Jan. 21
Feb. 1	Municipal System, Clearwater, Fla.	Jan. 19	Jan. 21

## APARTMENT-HOUSES.

Date to open bids.	Project	Date to open bids.	Project
Feb. 1	Herbert E. Green, Baltimore, Md.	Dec. 24	Dec. 31

## BANK AND OFFICE BUILDINGS.

Date to open bids.	Project	Date to open bids.	Project
Feb.	National City Bank, Birmingham, Ala.	July 28	July 30
Feb.	First National Bank, Coeburn, Va.	Aug. 12	Aug. 13
Jan.	Middletown Savings Bank, Middletown, Md.	Aug. 24	Aug. 27
Jan.	C. P. McKinney, Ripley, Tenn.	Oct. 29	Nov. 5
Jan.	E. P. Ansley, Atlanta, Ga.	Nov. 9	Nov. 12
Jan.	Manhattan Sav. Bank & Trust Co., Memphis, Tenn.	Nov. 11	Nov. 12
Jan.	Southern Life Insurance Co., Fayette, N. C.	Nov. 21	Nov. 26
Jan.	First National Bank, Hendersonville, N. C.	Nov. 19	Nov. 26
Jan.	Whitney Central National Bank, New Orleans, La.	Nov. 25	Dec. 3
Jan.	Guarantee Trust & Banking Co., Atlanta, Ga.	Nov. 27	Dec. 3
Jan.	Franklin Savings Bank, Frederick, Md.	Nov. 30	Dec. 3
Jan.	First National Bank, Roanoke, Va.	Dec. 15	Dec. 17
Jan.	P. H. Swearingen, San Antonio, Texas.	Dec. 16	Dec. 17
Jan.	Harbour & Bass, Oklahoma City, Okla.	Jan. 13	Jan. 14
Jan.	First National Bank, Prestonburg, Ky.	Jan. 13	Jan. 14
Jan.	Union Bank & Trust Co., Nashville, Tenn.	Jan. 15	Jan. 21

## CHURCHES.

Date to open bids.	Project	Date to open bids.	Project
Jan.	First Baptist Church, Paris, Ky.	July 13	July 16
Jan.	Hopkinsville, Ky.	Aug. 19	Aug. 20

Date to open bids.  
(When date is  
not given it has  
not been fixed.)

## CHURCHES.

Date to open bids.	Project	Date to open bids.	Project
Feb.	Green Cove Springs, Fla.	Sept. 22	Sept. 24
Feb.	Presbyterian Church, Whitman, Ga.	Nov. 2	Nov. 5
Mar. 1	Gillespie Avenue Baptist Church, Knoxville, Tenn.	Dec. 3	Dec. 10
Mar. 1	Conway, Ark.	Dec. 19	Dec. 24
Mar. 1	Presbyterian Church, Gainesville, Texas.	Dec. 29	Dec. 31
Feb. 1	M. E. Church, Okmulgee, Okla.	Jan. 5	Jan. 7
Feb. 1	Baptist Church; \$50,000; Birmingham, Ala.	Jan. 7	Jan. 14
Feb.	First Presbyterian Church, Chattanooga, Tenn.	Jan. 14	Jan. 21
Feb.	Baptist Church, Mobile, Ala.	Jan. 15	Jan. 21

## COURTHOUSES.

Date to open bids.	Project	Date to open bids.	Project
Mar. 15	Martinsburg, W. Va.	July 15	July 16
Mar. 15	Additions, Towson, Md.	Dec. 4	Dec. 10
Feb. 15	Fitzgerald, Ga.	Dec. 22	Dec. 24
Feb. 15	Remodeling; \$75,000; Nashville, Tenn.	Jan. 8	Jan. 14
Feb. 15	Boone County; \$35,000; Harrison, Ark.	Jan. 9	Jan. 14
Feb. 15	Remodeling; \$20,000; Christiansburg, Va.	Jan. 11	Jan. 14
Feb. 15	Stanford, Ky.	Jan. 11	Jan. 14
Feb. 15	Annex; Welch, W. Va.	Jan. 11	Jan. 14
Feb. 15	Remodeling, Christiansburg, Va.	Jan. 11	Jan. 21

## GOVERNMENT AND STATE BUILDINGS.

Date to open bids.	Project	Date to open bids.	Project
Jan. 23	U. S. Postoffice, etc., Newbern, N. C.	Nov. 28	Dec. 3
Feb. 1	U. S. Postoffice, etc., Anderson, S. C.	Dec. 17	Dec. 24
Feb. 1	U. S. Postoffice, Fayetteville, Ark.	Dec. 22	Dec. 24
Feb. 4	Barracks, Fort Moultrie, S. C.	Dec. 4	Dec. 10
Feb. 4	U. S. Postoffice, San Antonio, Texas.	Dec. 28	Dec. 31
Feb. 4	Three Hospital Buildings, Morgantown, N. C.	Jan. 9	Jan. 14
Feb. 17	U. S. Postoffice, Salisbury, N. C.	Jan. 12	Jan. 14
Feb. 9	Stable, Fort Myer, Va.	Jan. 13	Jan. 14
Feb. 18	U. S. Postoffice, Greenville, Miss.	Jan. 16	Jan. 21
Feb. 15	Officers' Quarters, Fortress Monroe, Va.	Jan. 19	Jan. 21

## HOTELS.

Date to open bids.	Project	Date to open bids.	Project
Jan.	Coleman-Fulton Pasture Co., Gregory, Texas.	Sept. 9	Sept. 10
Jan.	Beeville, Texas.	Nov. 25	Dec. 3
Jan.	Corpus Christi, Texas.	Nov. 25	Dec. 3
Jan.	El Reno, Okla.	Jan. 20	Jan. 21

## MISCELLANEOUS STRUCTURES.

Date to open bids.	Project	Date to open bids.	Project
Jan.	Infirmiry, Catlettsburg, Ky.	Oct. 21	Oct. 22
Jan.	County Home, Independence, Mo.	Dec. 7	Dec. 10
Jan.	Jail, Waycross, Ga.	Dec. 22	Dec. 24
Jan.	Clubhouse, Harrisburg, Texas.	Dec. 23	Dec. 24
Jan. 25	Jail, Fitzgerald, Ga.	Dec. 24	Dec. 31
Feb. 11	Jail, Madisonville, Tenn.	Jan. 12	Jan. 14
Mar. 4	Plans only, Orphanage, Winston-Salem, N. C.	Jan. 11	Jan. 14
Feb. 11	Jail, Fitzgerald, Ga.	Jan. 18	Jan. 21
Feb. 11	Jail, Madisonville, Tenn.	Jan. 18	Jan. 21

## MUNICIPAL BUILDINGS.

Date to open bids.	Project	Date to open bids.	Project
Jan.	City Stockade, Tampa, Fla.	Nov. 9	Nov. 12
Jan.	Police Station, Anacostia, D. C.	Dec. 1	Dec. 3
Jan.	Engine-house, St. Louis, Mo.	Dec. 26	Dec. 31
Jan.	Comfort Station, St. Louis, Mo.	Dec. 26	Dec. 31
Feb.	City Hall, etc., Nacogdoches, Texas.	Jan. 13	Jan. 14
Jan. 27	Hall and Hospital, Shawnee, Okla.	Jan. 16	Jan. 21
Jan. 27	Stable, Baltimore, Md.	Jan. 15	Jan. 21

## SCHOOLS.

Date to open bids.	Project	Date to open bids.	Project
Jan.	Nixon, Texas.	Sept. 23	Sept. 24
Mar. 1	Hartshorne, Okla.	Nov. 23	Dec. 3
Mar. 1	College Building, Stillwater, Okla.	Dec. 21	Dec. 24
Feb. 2	Moorhead, Miss.	Dec. 22	Dec. 24
Feb. 1	Thomas, Ga.	Jan. 4	Jan. 7
Feb. 1	Williamsburg, Ky.	Jan. 4	Jan. 7
Feb. 8	Plans and Bids, Midland, Texas.	Jan. 5	Jan. 7
Feb. 9	St. Augustine, Fla.	Jan. 12	Jan. 14
Jan. 25	State Normal School, Weatherford, Okla.	Jan. 13	Jan. 14
Feb. 17	Washington, D. C.	Jan. 14	Jan. 21
Apr. 15	Richmond, Ky.	Jan. 16	Jan. 21
Feb.	Port Arthur, Texas.	Jan. 16	Jan. 21
Feb.	Shawnee, Okla.	Jan. 16	Jan. 21

## THEATERS.

Date to open bids.	Project	Date to open bids.	Project
Feb. 1	Dugan & Nephew, Baltimore, Md.	Dec. 24	Dec. 31

## WAREHOUSES.

Date to open bids.	Project	Date to open bids.	Project
Feb. 25	State Warehouse, Baltimore, Md.	Dec. 15	Dec. 17
Feb. 15	Reinforced Concrete Structure, New Orleans, La.	Dec. 23	Dec. 24
Feb. 15	Cost \$25,000; Dallas, Texas.	Jan. 12	Jan. 14

[Continued from Page 66.]

this direction is proven by the excellent character of the designs and illustrations in the art and furniture pamphlet. The William J. C. Dulany Co. has its main offices at 339 and 341 North Charles street, Baltimore, Md.

### Want Metal-Shingle Information?

When building owners, architects or building contractors want information regarding improved building materials they should not overlook metal shingles. This class of equipment is being largely used, and the demand is steadily increasing. Data as to the well-known Cortright metal shingles can be found in the Cortright Metal Shingle Advocate, the January number of which has been published. Address the Cortright Metal Roofing Co., 50 North 23d St., Philadelphia, Pa.

### The Ferracuta Presses.

One of the new recent trade publications is a catalogue describing and illustrating the Ferracuta Machine Co.'s various lines of presses for sheet and bar metal. This company has been for years well known for its

successful designs of presses, and in its new catalogue calls attention to several lines that have not heretofore appeared, viz., drop presses, toggle drawing presses, horizontal double-ended screw presses for shells for cannon cartridges and improved automatic coining presses. The Ferracuta Machine Co.'s offices are at Bridgeton, N. J.

### Timely Graphite Information.

In Graphite for January will be found timely information regarding the different forms of graphite and their respective uses. The articles include "Test of Dixon's Flake Graphite on a Hot Five-Inch Shaft," "A Fine Record for Belts," "Preventing Corrosion of Steam Machinery" and "The Bangor & Aroostook Railroad." The Joseph Dixon Crucible Co., Jersey City, N. J., publishes Graphite, and in the January number refers to the recent death of E. F. C. Young, president of the corporation. Mr. Young had been associated with the enterprise for about 30 years, and from the time of his connection the company steadily progressed until it had established its present prominent position in the industrial world. Geo. T. Smith, the

vice-president, has been elected president to succeed Mr. Young, and Wm. H. Corbin, counsel for the company, has been elected vice-president.

#### Southern States Supply Co.

One of the most complete catalogues of plumbing, tinners' and machinery supplies issued recently is now being distributed. It is a 7x10-inch cloth-bound book of over 500 pages, illustrating and briefly describing the offerings of the Southern States Supply Co., 810-S18 Gervais St., Columbia, S. C. This company designates the book as Catalogue A, and in it presents data regarding fixtures, tools and specialties of every description in the plumbing supply line, wrought-iron pipe, brass and iron valves and fittings, mill and factory supplies, radiators and boilers, galvanized and black sheets, tinplate, solder, metals, etc. Photographic views are included of the company's offices, stock department, shipping facilities, etc. An alphabetical index of every article illustrated is included in the text of the book.

#### Self-Winding Clock Systems.

There was a time when people found it necessary to name the hour of the day by the use of sun-dials, hour-glasses and direct observation of the heavenly bodies, when it wasn't too cloudy or the hour-glass hadn't run out. Naturally, mankind was much pleased when clocks were invented, and these timekeepers have been improved from time to time. A most modern form of clock is that which insures precise, automatic and complete time by the use of electricity. One is reminded of these facts when glancing through the Standard Electric Time Co.'s book on self-winding clock systems. The publication describes and presents photographic views of the many different kinds of clocks manufactured by the company, including master clocks or regulators, hall clocks, weight-driven clocks, self-winding clocks, program clocks, tower clocks, etc., for use everywhere. The Standard Electric Time Co. has its offices in New York, Boston, and Waterbury, Conn.

#### The DeLoach Mill Manufacturing Co.

The development of the forests of the South has been accompanied by the establishment of Southern plants which design and manufacture the machinery needed for sawmills, planing mills and woodworking plants of various kinds. One of the leading Southern enterprises of this class is the DeLoach Mill Manufacturing Co., general offices and works at Bridgeport, Ala., and export office at 68 Broad St., New York. This company is now distributing a descriptive catalogue of its products, and includes photographic views of its old and new plants, its general offices, and the various mill machines and similar equipments offered to purchasers. Variable feeds, sawmills, mill carriages, wire-cable drives, heavy sawmills, set works, gang edgers, trimmers, "niggers," turners, hauls, saws, planers, corn mills, flour mills, etc., are included in the photographic views. It is interesting to add that the DeLoach catalogue is of pocket size and contains about 253 pages.

#### J-M Pipe and Boiler Insulation.

People who are interested in insulation will find timely data in a new illustrated booklet describing the principal types of J-M pipe and boiler covering perfected during the manufacturer's experience of 50 years in the production of asbestos and magnesia products. The manufacturer referred to is the H. W. Johns-Manville Co., 100 William St., New York, which, in the booklet, says: "The loss from radiation and condensation due to uncovered or improperly covered pipes, boilers or furnaces directly affects the coal pile. High-class insulation is absolutely imperative, owing to the present high cost of fuel and the growing demand among manufacturers to reduce the unit cost of production to a minimum. Every dollar wasted in fuel consumption detracts from the earning capacity and the profits of the plant. Our insulating materials are the outcome of careful, practical experiments in this field, and have demonstrated through many years of hard service their peculiar adaptability to the purposes for which they are recommended and the maximum earning power in coal saving. The best insulation is none too good to meet the increasing severity of modern requirements. We have made it a point to keep the efficiency of our materials abreast of the requirements, and, basing our claims upon the judgments of reputable engineers who have used our coverings for years with eminent satisfaction, we feel safe in offering them to the trade as the most complete, most economical, most durable and efficient insulating mediums on the market."

#### Alabama Tobacco.

Mr. William B. Schrader, special agent of the Bureau of Plant Industry of the National Department of Agriculture, having made a study of experiments in raising Sumatra tobacco in Mobile county, Alabama, has written to the Mobile Commercial Club as follows:

"The soil survey of this county by the United States Department of Agriculture shows that large quantities of land is well adapted for the growing of a fine grade of wrapper. The Sumatra wrapper grown in Florida is unexcelled as a wrapper for cigars by any wrapper grown in the world, and I have no doubt with the climate and soil conditions a similar wrapper can be raised in Mobile county, Alabama. Having the foundation and shape of soils and climate, and an expert supervision, the other features in the way of skilled labor will gradually come of themselves. The yield per acre will naturally increase by constant fertilization. I believe that certain soils in this county are well adapted for the growing of the Cuban filler tobacco. This does not require such expensive preparation, and could be grown by small farmers. Then with the proper packing-house facilities and cigar factories Alabama could produce a home-grown cigar equal to the best."

#### Development to Begin in March.

The Southern Coal & Transportation Co. of Robards, Ky., informs the MANUFACTURERS' RECORD that it recently purchased 8000 acres of coal lands at Robards, extending back to the Green River for a distance of about four miles. The company is installing a modern mining plant of 2500 tons daily capacity, and has already contracted for the electrical equipment and other necessary machinery for the plant and tipple. The plant is located on the Louisville & Nashville Railroad, and is expected to be in full operation by March 15. The company states that it is not at present contemplating the construction of a railroad from Robards to Green River, reports of which have been current.

#### North Carolina Builders.

The Master Builders' Association of North Carolina at its first annual session at Greensboro last week decided to become the North Carolina Master Builders' Exchange, and Messrs. J. A. Jones of Charlotte, L. B. Brickenstein of Winston and E. B. Tessier of Greensboro were appointed a committee to draft a constitution and by-laws. The officers of the association are Messrs. N. Underwood, president; J. N. Longest, vice-president, and B. Mackenzie, secretary and treasurer.

#### South Carolina.

The fifth annual report of Commissioner E. J. Watson of the State Department of Agriculture, Commerce and Immigration is a comprehensive survey of developments in South Carolina during the past year. It deals with the advance in agriculture of many phases, commerce, manufactures, banking and mining.

J. J. McCabe, New York, advises the MANUFACTURERS' RECORD that he desires to notify the business men that he has no traveling men at present in the South or West.

The Chamber of Commerce of Spartanburg, S. C., has elected Messrs. J. B. Lee, president; August W. Smith and D. D. Little, vice-presidents, and W. S. Glenn, secretary-treasurer.

The Chamber of Commerce of Pensacola, Fla., has elected Messrs. H. H. Thornton, president; B. S. Williams and Sol Cahn, vice-presidents; William H.

Knowles, H. L. Covington, B. S. Williams, Sol Cahn, H. H. Thornton, W. S. Keyser and Frank Reilly, board of directors.

## FINANCIAL NEWS

### Review of the Baltimore Market.

Office MANUFACTURERS' RECORD,  
Baltimore, Md., January 20.

Business was moderately active in the Baltimore stock market during the past week, and prices were generally steady. In the trading United Railways common sold at 10½ to 10; do. trust certificates, 10½ to 10; do. incomes, 51½ to 51½; do. funding 5s, 79 to 78, last sale at 78½; do. funding scrip, 78; United 4s, 85½ to 85½; Consolidated Gas, Electric Light & Power common, 35; do. 4½s, 84½ to 86½; Consolidated Gas 6s, 102 to 102½; do. 5s, 111; do. 4½s, 95½ to 95; Seaboard Company common, 14 to 13½; do. second preferred, 24; Seaboard 4s, 63½ to 64; do. 10-year 5s, 96½ to 96½; do. three-year 5s, 95½; Mt. Vernon-Woodberry Cotton Duck 5s, 79½ to 80½; G. B. S. Brewing common, 3½; do. 1st, 45½ to 44½.

Bank stock sold as follows: Mechanics', 27½ to 28; Citizens', 38; First National, 140; Western, 35; Bank of Baltimore, 120½; Exchange, 164½; Farmers and Merchants', 49.

Mercantile Trust sold at 139 to 140; Continental Trust, 195; Fidelity & Deposit, 149½; International Trust, 140; Maryland Casualty, 85 to 86; Fidelity Trust, 200; Maryland Trust, 65 to 66.

Other securities were traded in thus: Northern Central Railway stock, 102 to 111, reacting to 105, with last sale at 108; Western Maryland Railroad stock, 10 to 11½, last sale at 10½; Houston Oil common, 8½ to 10; do. preferred, 43 to 45; Georgia Southern & Florida 5s, 109½ to 109; Baltimore City 3½s, 128, 100; do. do. 1930, 100 to 100½; do. do. public improvement, 1940, 100; do. do. refunding, 1940, 100; do. do. 1980, 94½ to 94½; do. 4s, 1920, 104; do. 5s, 1916, W. L., 107½; do. 3½s, 1927, 90½; George's Creek Coal & Iron, 85; Detroit United 4½s, 80 to 81; Florida West Shore 5s, 87½; Northern Central 5s A, 113½; Western Maryland 1st 4s, 84½ to 85; Baltimore Electric 5s, 86½; 86½ to 87; Norfolk & Carolina 1st 5s, 112; Georgia Southern & Florida second preferred, 68 to 69½; Atlantic Coast Line Consolidated 4s, 96½ to 97½; Maryland Telephone 1st 5s, 95½ to 95½; German Fire Insurance, 16; Memphis Street Railway 5s, 95½; Mexican Central Consolidated 4s, 86½; Petersburg 5s A, 110½; Baltimore City Passenger 4½s, 100½; Consolidation Coal, 94; Georgia & Alabama Consolidated 5s, 102½ to 102½; Georgia, Carolina & Northern 5s, 104½; Atlantic Coast Line new 4s, certificates, 80½; City & Suburban 5s, Baltimore, 109½; Colorado Southern 1st 4s, 100; Maryland & Pennsylvania incomes, 61½; Chamber of Commerce (Baltimore) 1st 5s, 101½; Central Railway construction 5s, Baltimore, 112½; Wilmington, Columbia & Augusta 5s, 103; Tacoma Gas 5s, 1926, 60.

### SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended  
January 20, 1909.

Railroad Stocks.	Par.	Bid.	Asked.
Atlantic Coast of Conn.	100	244	249
Georgia South. & Fla.	100	92	95
Georgia South. & Fla. 1st Pfd.	100	92	95
Georgia South. & Fla. 2d Pfd.	100	67	71½
Norfolk Railway & Light	25	18½	19
Seaboard Co. Com.	100	13	14½
Seaboard Co. 2d Pfd.	100	23	25
United Rys. & Elec. Co.	50	94	104
Western Maryland.	50	104	11

Bank Stocks.	Par.	Bid.	Asked.
Citizens' National Bank	100	38	40
Com. & Far. White Ctr.	100	100	125
Com. & Far. Blue Ctr.	100	100	125
Far. & Mer. National Bank	40	48	50
First National Bank	100	149½	143
German-American Bank	100	106	106
Maryland National Bank	20	19	19
Mechanics' National Bank	100	165	165
National Bank of Baltimore	100	120	122½
National Exchange Bank	100	163	165
National Marine Bank	30	39½	40
National Mechanics' Bank	10	27	27
National Union Bank of Md.	100	120	128
Second National Bank	100	190	190
Third National Bank	100	118	118

Trust, Fidelity and Casualty Stocks.	Par.	Bid.	Asked.
American Bonding Co.	50	50	60
Continental Trust	100	194	210
Fidelity & Deposit	50	149½	149½
International Trust	100	185	185
Maryland Casualty	25	85	85
Maryland Trust	100	65	68
Merc. Trust & Deposit	50	147½	140
Safe Deposit & Trust	100	500	500
Union Trust	50	63½	70
U. S. Fidelity & Guaranty	100	112	112

### Miscellaneous Stocks.

Ala. Con. Coal & Iron	100	38
Ala. Con. Coal & Iron Pfd.	100	72½
Con. Cotton Duck Com.	50	7½
Con. Cotton Duck Pfd.	50	22½
Con. Gas, Elec. Lt. & P. Com.	100	32
Con. Gas, Elec. Lt. & P. Pfd.	100	80
Consolidation Coal	100	94
G. B. S. Brewing Co.	100	3 3½
George's Creek Coal	100	84½
Mer. & Miners' Trans. Co.	100	70

### Railroad Bonds.

Atlanta & Charlotte Ext. 4½s	99½	99½
Atlantic Coast Line 1st 4s, 1922	97	97
Atlantic C. L. 4s, Ctrfs., 1952	80½	80½
Atlantic C. L. Com. 4s, Ctrfs., 5-28s	88	88
Atlantic C. L. (Conn.) 5s, Ctrfs.	100	100
Atlantic C. L. (Conn.) 4s, Ctrfs.	81	81
Balto. & Harrisburg 5s, 1936	111	111
Balto. & Harrisburg Ext. 5s, 1938	102	102
Carolina Central 4s, 1949	92½	92½
Char. Col. & Aug. 1st 5s, 1910	107	107
Columbia & Greenville 1st 6s, 1916	109	111½
Florida Southern 4s, 1940	93½	93½
Georgia & Alabama 5s, 1945	102½	102½
Georgia, Car. & North. 1st 5s, 1929	104½	104½
Georgia Midland 5s	68	68
Georgia Sou. & Fla. 1st 5s, 1945	109	109½
Maryland & Pennsylvania 4s, 1951	93	95
Petersburg, Class A 5s, 1926	109	109
Petersburg, Class B 6s, 1926	109	109
Piedmont & Cum. 1st 5s, 1911	100	100
Potomac Valley 1st 5s, 1941	107½	108½
Raleigh & Augusta 1st 6s, 1926	115	115
Richmond & Danville Gold 6s, 1915	110	110
Sav. Fla. & West. 5s, 1934	113	113
Seaboard Air Line 4s, 1950	64½	64½
Seaboard Air Line 5s, 10-yr., 1911	96	96½
Seaboard Air Line 5s, 3-yr.	95½	96
Seaboard & Roanoke 5s, 1925	104	104
Southern Railway Com. 5s, 1994	107	107
Southern Railway Div. 4s	78	79
Virginia Midland 2d 6s, 1911	105	105
Virginia Midland 3d 6s, 1916	108	108
Virginia Midland 4th 4s, 1921	103	103
Virginia Midland 5th 5s, 1926	105	105
Western Maryland 4s, 1952	85	85½
Western North Car. Com. 6s, 1914	107	107
West Virginia Con. 1st 6s, 1911	102½	103
Wil. Col. & Aug. 6s, 1910	102½	102½
Wilmington & Wel. Gold 5s, 1935	115	115

### Street Railway Bonds.

Anacostia & Potomac 5s, 1949	103	104
Anacostia & Potomac 5s, gtd.	104	104½
Atlanta Con. St. Rwy. 5s	104½	105½
Augusta Rwy. & Elec. 5s, 1940	101	102
Baltimore City Passenger 5s, 1911	101½	101½
Balto. Spar. Pt. & Ches. 4½s	111½	112
Baltimore Trac. 1st 5s, 1929	111½	112
Balt. Trac. (N. Balt. Div.) 5s, 1942	113	113
Central Ry. Con. 5s (Balt.)	113	113
Charleston City Rwy. 5s, 1923	104½	104½
Charleston Con. Elec. 5s, 1959	89½	90
City & Suburban 5s (Balt.)	1922	109½
Knoxville Trac. 1st 5s, 1928	105	105
Memphis St. Rwy. 5s	95	96
Newport News & Old Pt. 5s, 1938	91	95
Norfolk Railway & Light 5s	95½	96½
Norfolk St. Rwy. 5s, 1944	106	106½
United Railways 1st 4s, 1949	85½	85½
United Railways Inc. 4s, 1949	51	52
United Railways Funding 5s	78½	79

### Miscellaneous Bonds.

Ala. Con. Coal & Iron 5s	82	85
Atlanta Gas 1st 5s, 1947	102	102
Baltimore & Electric 5s	86½	87½
Consolidated Gas 6s, 1910	102	102½
Consolidated Gas 5s, 1939	111	112
Consolidated Gas 4½s	95	95½
Consolidated Gas 4½s, Ctrfs.	95	95½
Con. Gas, Elec. Lt. & Power 4½s	85½	85½
Fairmont Coal 1st 5s	92½	95
G. B. S. Brewing 1st 4s	44	45
G. B. S. Brewing Inc. 4s	14	16½
Maryland Telephone 5s	95	95½
Mt. Vernon-Woodby Cot. Duck 5s	79½	79½
United Elec. Lt. & Power 4½s	93½	95

### SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for  
Week Ending January 18.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.)	75	75
Aiken Mfg. Co. (S. C.)	82	82
American Spinning Co. (S. C.)	145	145
Anderson Cotton Mills (S. C.)	50	60
Arkwright Mills (S. C.)	100	116
Augusta Factory (Ga.)	65	70
Avondale Mills (Ala.)	115	125
Belton Mills (S. C.)	115	120
Bibb Mfg. Co. (Ga.)	115	114
Brandon Mills (S. C.)	133	133
Cabarrus Cotton Mills (N. C.)	120	130
Chwick-Hoskins Mills (N. C.)	85	100
Chwick-Hoskins Mills Co. (N. C.)	100	100
Chickadee Mills (S. C.)	128	128
Clifton Mfg. Co. (S. C.)	102	107
Clifton Mfg. Co. (S. C.) Pfd.	99	101
Clinton Cotton Mills (S. C.)	120	120
Columbus Mfg. Co. (Ga.)	98	98
Courtenay Mfg. Co. (S. C.)	96	96
Dallas Mfg. Co. (Ala.)	95	95
Darlington Mfg. Co. (S. C.)	70	76
Drayton Mills (S. C.)	100	100
Eagle & Phenix Mills (Ga.)	121	121
Easley Cotton Mills (S. C.)	140	150
Enoree Mfg. Co. (S. C.)	69	73
Enoree Mfg. Co. (S. C.) Pfd.	100	100
Enterprise Mfg. Co. (Ga.)	82	90
Exposition Cotton Mills (Ga.)	240	240
Gaffney Mfg. Co. (S. C.)	65	70
Gainesville Cotton Mills (Ga.)	48	70
Granby Cot. Mills (S. C.) 1st Pfd.	45	45
Granville Mfg. Co. (S. C.)	155	160
Greenwood Cotton Mills (S. C.)	90	90
Grendel Mills (S. C.)	110	115
Henrietta Mills (N. C.)	160	175
King Mfg. Co., John P. (Ga.)	96	100
Lancaster Cotton Mills (S. C.)	125	146
Lancaster Cot. Mills (S. C.) Pfd.	91	96
Lancaster Mfg. Co. (S. C.)	93	93
Laurens Cotton Mills (S. C.)	145	145
Limestone Mills (S. C.)	140	140
Lockhart Mills (S. C.)	90	86
Lockhart Mills (S. C.) Pfd.	97	97
Loray Mills (N. C.) Pfd.	90	92
Marlboro Cotton Mills (S. C.)	75	76½
Mayo Mills (N. C.)	165	165
Mills Mfg. Co. (S. C.)	103½	103½
Mills Mfg. Co. (S. C.) Pfd.	109	109
Monaghan Mills (S. C.)	110	112
Monarch Cotton Mills (S. C.)	101	101
Newberry Cotton Mills (S. C.)	140	140
Norris Cotton Mills (S. C.)	115	120
Olympia Cot. Mills (S. C.) 1st Pfd.	70	80
Orangeburg Mfg. Co. (S. C.) Pfd.	80	80



Orr Cotton Mills (S. C.).....	106	108
Pacolet Mfg. Co. (S. C.).....	135	135
Pacolet Mfg. Co. (S. C.) Pfd.....	90	100
Pelzer Mfg. Co. (S. C.).....	160	175
Piedmont Mfg. Co. (S. C.).....	130	175
Poe Mfg. Co. (S. C.).....	130	175
Richland Cot. Mills (S. C.) Pfd.....	45	45
Raleigh Cotton Mills (N. C.).....	100	100
Roanoke Mills (N. C.).....	168	168
Saxon Mills (S. C.).....	122	125
Sibley Mfg. Co. (Ga.).....	62 1/2	140
Spartan Mills (S. C.).....	132	136
Springstein Mills (S. C.).....	100	100
Tucapau Mills (S. C.).....	200	140
Trion Mfg. Co. (S. C.).....	140	140
Union-Buttalo Mills (S. C.) 1st Pfd.....	58 1/2	60
Victor Mfg. Co. (S. C.).....	120	125
Warren Mfg. Co. (S. C.).....	92	93
Warren Mfg. Co. (S. C.) Pfd.....	100	100
Washington Mills (Va.).....	25	31
Washington Mills (Va.) Pfd.....	110	120
Whitney Mfg. Co. (S. C.).....	140	140
Williamston Mills (S. C.).....	125	135
Wiscasset Mills (N. C.).....	125	135
Woodruff Cotton Mills (S. C.).....	118	122
Woodside Cotton Mills (S. C.) Pfd.....	95	100

**Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending January 18.**

Abbeville Cotton Mills (S. C.).....	70	70
Alken Mfg. Co. (S. C.).....	82	82
American Spinning Co. (S. C.).....	145	150
Anderson Cotton Mills (S. C.).....	57	63
Arcadia Mills (S. C.).....	90	90
Arkwright Cotton Mills (S. C.).....	100	105
Augusta Factory (Ga.).....	65	70
Avondale Mills (Ala.).....	110	125
Belton Mills (S. C.).....	116	116
Brandon Mills (S. C.).....	135	135
Cabarrus Cotton Mills (N. C.).....	120	130
Chadwick Mfg. Co. (N. C.) Pfd.....	103	103
Chiquola Mfg. Co. (S. C.).....	125	128
Clifton Mfg. Co. (S. C.).....	101	101
Clifton Mfg. Co. (S. C.) Pfd.....	99	103
Clinton Cotton Mills (S. C.).....	105	105
Columbia Mfg. Co. (Ga.).....	98	98
Courtenay Mfg. Co. (S. C.).....	97	97
Dallas Mfg. Co. (Ala.).....	90	96
Darlington Mfg. Co. (S. C.).....	70	75
Converse Co., D. E. (S. C.).....	112	112
Drayton Mills (S. C.).....	100	100
Eagle & Phoenix Mills (Ga.).....	120	137
Easley Cotton Mills (S. C.).....	145	150
Enoree Mfg. Co. (S. C.).....	69	75
Enoree Mfg. Co. (S. C.) Pfd.....	100	100
Enterprise Mfg. Co. (Ga.).....	82	90
Exposition Cotton Mills (Ga.).....	240	240
Gaffney Mfg. Co. (S. C.).....	67	67
Gainesville Cotton Mills (Ga.).....	55	55
Granby Cot. Mills (S. C.) 1st Pfd.....	45	45
Graniteville Mfg. Co. (S. C.).....	160	165
Greenwood Cotton Mills (S. C.).....	65	65
Grendel Mills (S. C.).....	109	118
Hartsville Cotton Mill (S. C.).....	125	125
Henrietta Mills (N. C.).....	160	175
Inman Mills (S. C.).....	105	110
Lancaster Cotton Mills (S. C.).....	110	125
Lancaster Cot. Mills (S. C.) Pfd.....	91	96
Langley Mfg. Co. (S. C.).....	91	96
Laurens Mills (S. C.).....	148	148
Limestone Mills (S. C.).....	141	141
Lockhart Mills (S. C.).....	82	82
Lockhart Mills (S. C.) Pfd.....	95	95
Loray Cotton Mills (N. C.) Pfd.....	90	96
Marlboro Cotton Mills (S. C.).....	96	96
Mills Mfg. Co. (S. C.).....	100	100
Molokoh Mfg. Co. (S. C.).....	95	100
Monaghan Mills (S. C.).....	115	115
Monarch Cotton Mills (S. C.).....	99	104
Newberry Cotton Mills (S. C.).....	145	145
Ninety-Six Cotton Mills (S. C.).....	115	120
Norris Cotton Mills (S. C.).....	120	120
Odell Mfg. Co. (N. C.).....	90	90
Olympia Cotton Mills (S. C.).....	68	68
Orr Cotton Mills (S. C.).....	104	104
Pacolet Mfg. Co. (S. C.).....	160	160
Pacolet Mfg. Co. (S. C.) Pfd.....	97	100
Pelzer Mfg. Co. (S. C.).....	168	168
Piedmont Mfg. Co. (S. C.).....	175	180
Poe Mfg. Co. (S. C.).....	130	135
Saxon Mills (S. C.).....	122	125
Sibley Mfg. Co. (Ga.).....	62	62
Spartan Mills (S. C.).....	130	140
Trion Mfg. Co. (Ga.).....	132	140
Tucapau Mills (S. C.).....	210	210
Union-Buttalo (S. C.) 1st Pfd.....	60	60
Victor Mfg. Co. (S. C.).....	122	130
Warren Mfg. Co. (S. C.).....	92	93
Warren Mfg. Co. (S. C.) Pfd.....	100	100
Washington Mills (Va.).....	25	31
Washington Mills (Va.) Pfd.....	100	110
Whitney Mfg. Co. (S. C.).....	140	140
Wiscasset Mills (N. C.).....	125	135
Woodruff Cotton Mills (S. C.).....	122	130
Woodside Cotton Mills (S. C.).....	103	103
Watts Mills (S. C.).....	90	90
Williamston Mills (S. C.).....	101	101

**Annual Statements.**

The Home Insurance Co., 56 Cedar street, New York, has issued its one hundred and eleventh semi-annual statement, dated January, 1909, which shows total assets \$24,856,499. This includes United States bonds, State and city bonds, railroad bonds, miscellaneous bonds, railroad stocks, miscellaneous stocks, bank and trust company stocks, real estate, bonds and mortgages on real estate and cash, the latter amounting to \$1,765,003. The capital of the company is \$3,000,000; reserve premium fund, \$9,515,887; reserve for losses, \$1,018,626; surplus over contingencies and all liabilities, including capital, \$9,882,821; surplus as regards policyholders, \$13,682,821. The officers are Elbridge G. Snow, president; Emanuel H. A. Correa and Frederic C. Buswell, vice-presidents; Arunah M. Burtis and Charles L. Tyner, secretaries, and Henry J. Ferris and Clarence A. Ludlum, assistant secretaries.

The Baltimore Trust & Guaranty Co.

of Baltimore, Md., reports at close of business December 31, 1908, investments, book value, \$4,404,312; loans secured by collateral, \$1,481,904; cash, \$496,498; capital stock, \$800,000; surplus, \$2,000,000; undivided profits (increase \$25,338), \$145,862; due banks, secured, \$250,000; deposits (increase \$321,923), \$3,212,238; total resources, \$6,484,843. Thomas H. Bowles is president; Eugene Levering, Charles W. Bear and George C. Morrison, vice-presidents; Henry W. Warner, treasurer, and V. G. Dunington, secretary.

**Bank Reports.**

The West Virginia National Bank at Huntington, W. Va., reports at close of business December 31, 1908, loans and discounts, \$339,687; legal reserve and cash, \$104,015; capital stock, \$135,000; surplus fund, \$30,000; circulation, \$125,000; deposits, \$331,867; total assets, \$636,213. C. W. Campbell is president; M. Broh and J. B. Stevenson, vice-presidents; Robert L. Archer, cashier, and Wm. H. Gideon, assistant cashier.

**New Corporations.**

Alexander, Texas.—The Alexander State Bank, capital \$10,000, has been granted a charter. G. W. Riddle, Lee Riddle, J. L. Richardson and others are the incorporators.

Alpharetta, Ga.—The Alpharetta Bank has been chartered with \$25,000 capital by J. H. Manning, John W. Swilling, George D. Rucker, J. R. Trammell and Thomas M. Ezzard, all of Alpharetta, Ga.

Appalachia, Va.—The First National Bank has been approved; capital \$25,000. The organizers are E. J. Prescott, Big Stone Gap, Va.; C. F. Blanton, J. C. Fuller, E. C. Mainsur and H. F. Whitehead.

Athens, Tenn.—The McMinn County Farmers' Fire Insurance Co. is reported to have received its charter. The organizers are W. Gettys, H. H. Matlock, A. M. Keith, S. T. Porter, John Gregory, J. A. Reagan, S. T. Gettys.

Bastrop, Texas.—The Citizens' State Bank of Bastrop, capital \$25,000, has applied for charter to begin business in 10 days. The directors are Paul D. Page, president; J. L. Wilbarger, first vice-president; H. B. Combs, second vice-president; J. T. Crysup, cashier; F. E. Pye, Woody Townsend, Alf Griesenbeck, Hugh Barton and H. J. Kesselus.

Beaumont, Texas.—The Commercial National Bank has been approved; capital \$150,000. The organizers are J. F. Keith, W. C. Gray, T. W. Garrett, Joseph E. Carroll and John L. Leith.

Birmingham, Ala.—The City Bank & Trust Co. has begun business; offices in the Woodward Building; capital \$100,000; president, Ben T. Head; vice-president, Sibley P. King; secretary and treasurer, R. C. Head; assistant secretary and treasurer, H. S. Davis. The directors include President Head, R. A. Brown, G. C. Cole, W. E. Spink and T. J. Carson of Birmingham, Ala., and Thomas Boggess, Jr., of Ashland, Ky.

Chandler, Okla.—The First State Bank has been authorized to begin business; capital \$15,000; Charles A. Tilghman, president; F. A. Ashton, vice-president; F. W. Clegg, cashier.

Charleston, W. Va.—The Bladel Investment Co., capital \$75,000, has been incorporated by Newell H. Clapp, A. E. Macartney, L. A. Peil, J. W. Mahan, Fred Jones, all of St. Paul, Minn.

Charlotte, N. C.—The Stonewall Trust Co. has been chartered with an authorized capital of \$125,000. The incorporators are John B. Ross, T. A. Adams and others.

Comanche, Okla.—The Comanche State Bank has been chartered with \$15,000 capital. Incorporators are C. S. Wade, Co-

manche; W. Dean and T. L. Wade, Marlow.

Dallas, Texas.—Local reports state that a \$500,000 bank is being organized and that business is expected to begin about February 1. J. Howard Ardrey will be one of the active officers, and the directors include J. B. Wilson, R. H. Stewart, Rhodes S. Baker, G. H. Schoellkopf, A. Silberstein, Guy Sumpter, J. Howard Ardrey and others.

Edwardsville, Ala.—Reported that W. K. Smith of Birmingham is organizing a bank in Edwardsville, and that stock has all been taken.

Fort Worth, Texas.—The American Home Life Insurance Co., capital \$500,000, has been granted a charter. The incorporators are R. T. Stuart, C. K. Bell, B. B. Paddock, W. D. Reynolds, T. B. Yarborough, J. J. Jarvis and W. T. Waggoner, all of Tarrant county, and C. N. Walker of Dallas county.

Fort Worth, Texas.—The American Home Life Insurance Co. has been approved; capital \$500,000. The incorporators are R. T. Stuart, C. K. Bell, B. B. Paddock, W. D. Reynolds, T. B. Yarborough, J. J. Jarvis and W. T. Waggoner, all of Tarrant county, and C. N. Walker of Dallas county.

Greenville, S. C.—Reported that Chas. F. Hard of Greenville will be president and St. John P. Kinloch of Charleston will be secretary of the American Home Fire Insurance Co., which is to be organized with a capital of \$300,000 and surplus of \$150,000. The committee on organization includes Ellison A. Smyth, Henry P. McGee, J. W. Norwood, A. A. Bristow and Lewis W. Parker. Headquarters at Greenville.

Houston, Texas.—The Houston National Exchange Bank has been approved; capital \$200,000. The organizers are Henry S. Fox, Jos. F. Meyer, M. M. Graves, H. A. Paine and Leon Levy.

Jackson, Ky.—The First National Bank of Jackson has been authorized to begin business; capital \$25,000. James P. Adams is president and J. H. Letton, Jr., cashier.

Kennesaw, Ga.—The Bank of Kennesaw, capital \$25,000, is reported organized with John W. Bennett, president; J. G. Lewis, vice-president, and W. P. Whitaker, cashier.

Kilmarnock, Va.—Reports state that the G. E. Mumford Banking Co. has been reorganized with an authorized capital of \$50,000, and that a new charter will be applied for. The officers are J. B. Cralle, president; S. E. Mumford, first vice-president; Dr. B. H. B. Hubbard, second vice-president; W. S. James, secretary and cashier; J. B. Cralle, W. T. James, S. E. Mumford, Dr. B. H. B. Hubbard, W. E. Hathaway, W. A. Dameron, W. A. Eubank, R. O. Morris, Jr., and W. G. Bean, directors.

Kinston, N. C.—The Farmers and Merchants' Bank of Kinston has been chartered; capital \$25,000. Henry T. Knott, W. A. Mitchell, Chas. F. Harvey and others are the incorporators.

Little Rock, Ark.—W. B. Duff & Co. has been incorporated to do an insurance business; capital \$25,000, of which \$10,000 are subscribed. The directors are W. B. Duff, president; J. F. Lee, secretary and treasurer, and J. B. Nabors.

Little Rock, Ky.—The Citizens' Home Bank is reported being organized with \$25,000 capital, to begin business March 1. A. L. Soper is chairman and J. Elmer Boardman secretary of the temporary organization. Others interested are Jonathan Burris, Thomas Hinkle, J. W. Young, R. H. Burris, B. F. Hopkins, W. P. Thomas, Dr. B. F. McClure and Edsell Clarke.

Louisville, Ky.—The Sterling Company

has filed its charter; capital \$10,000. The incorporators are Samuel T. Castleman, George C. Sandifer and George P. Enrick.

Lynchburg, Va.—The Lynchburg Investment Corporation has been chartered with capital from \$5000 to \$500,000 to purchase, lease or otherwise hold real or personal property; to build houses, light and power plants, etc.; also to lay out and build thoroughfares. The directors are: President, W. D. Hill of South Boston, Va.; secretary and treasurer, R. Holt Easley of Houston, Va., and James S. Easley, also of Houston.

Mamou, La.—Steps are being taken, it is stated, to organize the Mamou State Bank.

Marion, Ark.—The Crittenden County Bank & Trust Co., capital \$75,000, has been incorporated by L. P. Berry, president; S. I. Newman, vice-president; S. V. Neely, secretary; John M. Taylor, F. W. Reisinger, W. J. Hardin, P. A. Barton, Otto Seyppel, Samuel Keel and Louis Barton. The company also proposes to operate a branch bank at Earle. The Crittenden County Bank & Trust Co. succeeds the Bank of Marion, it is stated.

Mt. Pleasant, Tenn.—The First National Bank has been authorized to begin business; capital \$50,000; D. W. Shofner is president and J. E. Hackney cashier.

Midlothian, Texas.—The Farmers' State Bank, capital \$10,000, has been incorporated by M. W. Hawkins, H. M. Burleson, B. F. Hawkins and G. W. Newton.

Norfolk, Va.—The Traders' Credit and Collection Corporation, capital \$1000 to \$25,000, has been granted a charter. J. T. Steele is president; Watte Gantt, vice-president; Hugh Johnson, secretary and treasurer.

Oklahoma City, Okla.—Local reports state that a new bank with \$25,000 capital will be opened about March 1. W. E. Hodges will be president and Frank C. Haskett cashier. It is stated it will be a day and night bank.

Olive Hill, Ky.—The Carter County Commercial Bank, it is reported, has been organized by A. J. Stamper, William Whitt, A. J. Whitt and Richard Carpenter of Olive Hill and G. W. Stamper of Vanceburg.

Olustee, Okla.—The Farmers' State Bank has been incorporated with \$10,000 capital. The directors are A. B. Dunlap and N. T. Gilbert, both of Lawton, Okla.; B. E. Kelly, Tom R. Moore, I. W. Satterfield and E. S. Crow, all of Olustee.

Petersburg, Va.—The Sterling Securities Corporation, to conduct the business of capitalists, promoters, financiers, insurance agents, etc., has been incorporated, with principal office in Petersburg. All the officers are residents of Norfolk, Va. They are C. A. Withrow of Norfolk, president; Robert Scott, vice-president; R. S. Scott, secretary; E. K. Wilson, treasurer; Raymond Hudson, general counsel.

Polkton, N. C.—The Bank of Polkton, authorized capital \$100,000, has been incorporated by W. F. Edwards, J. C. Goodman, D. A. Carter and others.

Port Arthur, Texas.—The Merchants' State Bank, capital \$25,000, will, it is stated, begin business about February 1. W. E. Hall will be president and Frank Lopez secretary and G. G. Hall cashier. It is also stated that the new company has absorbed the Port Arthur branch of the Park Bank & Trust Co. of Beaumont.

Scranton, Ark.—The Bank of Scranton has been incorporated with \$25,000 capital. The incorporators are George Heim, president; J. E. Nichols, vice-president; B. B. Chitwood, secretary; Sam Laser, treasurer, and A. N. Ragon.

Shamrock, Texas.—The Farmers and Mechanics' State Bank, capital \$25,000, has been incorporated by W. G. Flynt, E. H. Small, S. W. Norwood and others.

St. Louis, Mo.—The Union Station Bank will, it is stated, begin business January 30. The capital is \$100,000, and Charles E. Lane will be president.

St. Louis, Mo.—The Mortgage Guarantee Co. of St. Louis has been incorporated to guarantee loans on real estate; capital \$500,000. The incorporators are Rolla Wells, J. D. Perry Francis, Fred G. Zeibig, H. Blakley Collins, Alfred L. Shapleigh, Dwight F. Davis, Richard T. Shelton, Aaron Fuller, Charles M. Polk, Geo. W. Niedringhaus and Tom W. Bennett, the latter being the principal stockholder.

Tarboro, N. C.—The Tarboro Trust Co. has been incorporated with \$25,000 capital by Biscoe Howell, Britt B. Howell and Emma R. Howell.

Terrell, Okla.—The First State Bank of Terrell, Okla., capital \$10,000, has been chartered by A. B. Dunlap and N. T. Gilbert of Lawton, Okla., and S. S. Wray of Terrell.

Towson, Md.—The Pleasant Hill Permanent Building and Loan Association of Baltimore County has been incorporated with \$150,000 capital by J. Frank Shipley, William R. Bowers, J. George Ritter, Goucher Tase, Frank C. Rutter, William J. Hooper and Watson E. Sherwood.

Tyler, Texas.—The State Bank of Tyler, capital \$50,000, will, it is reported, file charter and soon begin business. The incorporators are R. N. Stafford, Reagan Wofford, J. M. Edwards and J. B. Parker.

Tyler, Texas.—Reported that another new bank, with \$50,000 capital, will be organized by Mr. Ezell of Palestine and others.

Waco, Texas.—The Southern Union Insurance Co. is reported organized with \$250,000 capital, business to begin about June 1. The incorporators are H. B. Mistrot, Dr. N. A. Olive, A. C. Prendergast, J. D. Williamson, J. W. Kouch and others.

Walter, Okla.—The Oklahoma State Bank of Walter, which is to begin business immediately, has organized. R. L. Reid is president, Frank Wiemer vice-president and B. C. Coleman cashier. The stockholders and directors are J. A. Wolham, J. E. Luke, J. B. Selman, R. L. Reid, B. S. Coleman, Frank Wiemer, G. M. James, S. H. Blair, W. H. Dyer and S. C. McAdams.

Webster, N. C.—The Tuckaseegee Bank, capital \$10,000, has been granted a charter. The incorporators are O. B. Coward, A. B. Allison and others.

Wylam, Ala.—Reported that the Bank of Ensley will establish a branch at Wylam.

#### New Securities.

Abbeville, S. C.—It is reported that \$20,000 of school-building bonds are to be issued. Address Board of School Trustees.

Atlanta, Ga.—Local reports state that the election to vote on \$1,500,000 or \$2,000,000 of school, sewer and water-works bonds will probably be held in March. The issue is expected to be \$1,000,000 for sewers, \$500,000 for schools and \$500,000 for water-works; all at 4½ per cent.

Auburn, Ala.—The city is reported to have voted bonds for water-works.

Austin, Texas.—The County Commissioners of this (Travis) county are reported to have rejected all bids for the issue of \$303,000 of road and bridge bonds.

Beaumont, Texas.—Reports state that it is proposed to issue \$60,000 of bonds of Willow Marsh Drainage District, Jefferson county.

Bristol, Tenn.—A bill is to be introduced in the Legislature, it is reported, authorizing this (Sullivan) county to vote on an issue of \$400,000 of road bonds.

Brownwood, Texas.—A. B. Leach & Co. of Chicago are reported to have been

awarded at \$1623 premium \$25,000 of school and street bonds.

Charlotte, Tenn.—Reports state that an election will probably be called by the commissioners of Dickson county to decide the question of issuing road bonds.

Charlotte C. H., Va.—Reported that the \$100,000 bond issue for road improvements in Charlotte county has been voted. With money on hand, it is said about \$165,000 will be expended.

Chattanooga, Tenn.—The Security Trust & Savings Co. of Toledo, Ohio, has been awarded at a premium \$4000 of paving bonds.

Clearwater, Fla.—Bids will be received until February 1 by H. W. Bivins, chairman Board of Bond Trustees, for \$25,000 of water and \$15,000 of sewer 5 per cent. 5-30-year bonds.

Cornish, Okla.—Bids are being received by W. C. Downing, clerk Cornish School District No. 14, for \$7990 of 6 per cent. school district bonds.

Dallas, Texas.—The finance committee of the Board of Education, it is reported, has agreed to and will recommend a bond issue of \$150,000.

Denton, Texas.—The Attorney-General has approved \$12,500 of 5 per cent. 10-40-year sewer bonds.

Elberton, Ga.—An election will be held February 16 to vote on \$35,000 of 5 per cent. 30-year school bonds.

Green Cove Springs, Fla.—An election is to be held in Clay county February 16 to vote on \$75,000 of road bonds.

Elizabeth City, N. C.—The \$12,000 of bonds issued by the Elizabeth Telegraph & Telephone Co. were purchased at 101 by the Citizens' Bank.

El Reno, Okla.—Reports state that the question of issuing \$250,000 of park bonds is being considered.

Erick, Okla.—The election on January 12, according to an official letter to the MANUFACTURERS' RECORD, voted \$27,500 of 6 per cent. 25-year bonds for water-works. A. G. Gillum is Mayor.

Fort Pierce, Fla.—The election to vote on \$150,000 of St. Lucie county road bonds will, it is stated, be held April 20.

Graymont, W. Va.—An election is to be held February 15 to vote on \$10,000 of school and \$10,000 of sewer extension 5 per cent. 20-year bonds. W. A. Lester is Mayor.

Greensboro, N. C.—Reported that the highest bid for the \$55,000 of 5 per cent. Guilford county highway bonds was received from the Security Trust Co. of Spartanburg, S. C., viz., \$60,537.

Greenville, Tenn.—Reports state that the election called for January 9 to vote on \$20,000 of street and \$15,000 of water bonds was declared off.

Guthrie, Okla.—The MANUFACTURERS' RECORD is informed that the Oklahoma Bond & Trust Co. of Guthrie has purchased the following Oklahoma securities: \$1200 of 6 per cent. 20-year school district No. 2, Carter county; \$6000 of 6 per cent. 20-year school district No. 27, Carter county; \$1000 of 6 per cent. 20-year school district No. 42, Carter county; \$1200 of 6 per cent. 20-year school district No. 42, Craig county; \$500 of 7 per cent. 15-year school district No. 34, Garvin county; \$1000 of 6 per cent. 20-year school district No. 9, Murray county; \$800 of 7 per cent. 20-year school district No. 36, Okmulgee county; \$1000 of 6 per cent. 20-year school district No. 33, Okmulgee county; \$1500 of 6 per cent. 15-year school district No. 29, Okmulgee county; \$1500 of 6 per cent. 20-year school district No. 25, Seminole county; \$850 of 7 per cent. 20-year joint school district No. 12, Seminole and Hughes counties; \$2000 of 6 per cent. 20-year school district No. 56, Wagoner county; \$1200 of 6 per cent. 20-year school district

No. 47, Wagoner county; \$1000 of 6 per cent. 20-year school district No. 60, Wagoner county, and \$1600 of 6 per cent. 20-year school district No. 49, Wagoner county bonds.

Guthrie, Okla.—Preparations are being made, it is stated, to place \$1,000,000 of 4 per cent. Oklahoma State bonds on the market at private sale. James Menefee is State Treasurer.

Hannibal, Mo.—Reported that \$75,000 of city hall bonds have been voted.

Hartshorne, Okla.—The election for \$80,000 of water-works bonds and \$25,000 sewerage bonds was carried for the bonds by about 10 to 1, according to an official letter to the MANUFACTURERS' RECORD.

Jackson, Ga.—The election held in Butts county, it is reported, to decide the question of issuing road bonds was defeated.

Jonesboro, Tenn.—The election to vote on \$150,000 of Washington county road bonds will be held March 13.

Kansas City, Mo.—Reports state that the Fidelity Trust Co. of Kansas City has been awarded at \$6375 premium \$250,000 of 4 per cent. 15-year market-improvement bonds.

Kiowa, Okla.—The city has voted \$31,000 of 6 per cent. water-works and electric-light bonds.

Knoxville, Tenn.—A bill providing for an election in Knox county upon a proposed issue of \$500,000 of road bonds is being prepared for introduction in the Legislature, it is reported, by W. R. Turner, J. W. Caldwell and Jerome Templeton.

Knoxville, Tenn.—An ordinance has been approved for an issue of \$3234 of 6 per cent. bonds for improvement district No. 34 of the city of Knoxville.

Lake Providence, La.—Reports state that the First National Bank, Lake Providence, has been authorized to negotiate the sale of \$27,000 of 5 per cent. funding, water and light bonds.

Lenoir, Tenn.—The Knoxville Banking & Trust Co., Knoxville, Tenn., is reported to have bought at par the \$15,000 of 30-year Lenoir City improvement bonds.

Lufkin, Texas.—The Attorney-General has approved \$20,000 of 5 per cent. 10-40-year water-works improvement bonds.

Lufkin, Texas.—Reports state that the question of issuing \$20,000 of water-works bonds is under consideration.

Monticello, Fla.—The Robinson-Humphrey Company of Atlanta has been awarded at \$36,715.50 the \$35,000 of Jefferson county courthouse bonds.

Muskogee, Okla.—A special election has been called for January 23 to vote on the proposed bond issue of \$300,000 for additional school buildings.

New Orleans, La.—Reported that the Orleans Levee Board awarded to N. W. Harris & Co. of New York and Chicago and to the Whitney-Central Trust and Savings Bank of New Orleans the issue of \$2,756,000 of 5 per cent. bonds at a premium of more than \$135,000, their bid being at the rate of 104.899.

Pocomoke City, Md.—Bids will be received until 3 P. M. February 1 for \$12,000 of 5 per cent. city floating debt bonds. Littleton P. Ewell is Clerk.

Richmond, Va.—At noon on January 26 the School Board of Highland Park School District No. 5, Henrico county, will sell \$30,000 of 5 per cent. 5-30-year bonds. G. W. Bahlke is chairman of the board, 900 E. Broad St., Richmond.

San Marcos, Texas.—An election has been ordered to vote on \$5000 of street improvement bonds.

Siler City, N. C.—Reports state that application is to be made to the Legislature for authority to issue \$5000 of improvement bonds.

Slidell, La.—It is reported that \$20,000

of school district building bonds are to be sold.

Sparta, Tenn.—A bill for an issue of \$15,000 of high-school bonds in Sparta is reported favorably in the State Senate.

St. Joseph, Mo.—An election is to be held in Buchanan county January 26, it is stated, to vote on \$100,000 of 4 per cent. 10-year jail bonds.

Tulsa, Okla.—The City Council has decided to call an election February 16 to vote on \$100,000 of gas-main bonds, \$25,000 for parks, \$20,000 for fire department, \$20,000 for water-works improvement, \$20,000 for refunding and \$10,000 for a city storage-house.

Tuscaloosa, Ala.—An ordinance is to be prepared, it is stated, providing for the issuing of \$25,000 of school bonds.

Vernon, Texas.—An issue of \$6270 of 4 per cent. 5-20-year school refunding bonds has been approved by the Attorney-General.

Waycross, Ga.—The Mayor is reported to have recommended to the Ware County Commissioners the calling of a special election to vote on \$200,000 of road, paving, jail and other improvement bonds.

Weatherford, Texas.—John Nuveen & Co. of Chicago is said to be the purchaser of the \$25,000 of 6 per cent. 25-year water and light bonds recently reported sold.

Welch, W. Va.—Bids will be received until noon March 15 for the \$50,000 of 5 per cent. 10-20-year McDowell county public building bonds.

Wesson, Miss.—It is reported that unless 20 per cent. of the adult taxpayers petition against it, \$8000 of 5 per cent. school bonds will be issued February 8.

Willacoochee, Ga.—Bids will be received until 8 P. M. February 8 by W. Moore, town clerk, for \$14,000 of 5 per cent. 20-year water and light bonds.

Wynnewood, Okla.—The Board of Education has called an election for January 30 to vote on \$15,000 of school building bonds.

Bids will be received until noon March 15 at Welch, W. Va., for \$50,000 of 5 per cent. 10-20-year McDowell county public building bonds. Further particulars will be found in the advertising columns.

#### Financial Notes.

Reports state that \$25,000 of Decatur (Ala.) public-school bonds have been retired.

The People's Bank of Magnolia, Ark., is reported to have increased its capital to \$50,000.

Reports from Natchez, Miss., state that \$15,000 of bonds have been taken up during 1908.

The Southern States Trust Co. of Columbia, S. C., will, it is stated, open a branch office in Atlanta, Ga.

The Bank of Como and the Merchants and Planters' Bank, both of Como, Miss., are reported to have consolidated.

The People's National Fire Insurance Co. of Philadelphia, Pa., has, it is reported, been authorized to do business in Texas.

The capital of the First National Bank of Houston, Texas, is reported to have been increased from \$500,000 to \$1,000,000.

It is reported that the Jefferson County Savings Bank at Birmingham, Ala., has increased its capital from \$100,000 to \$200,000.

Reports state that it is proposed to increase the capital of the Commercial Savings Bank of Charleston, S. C., from \$50,000 to \$100,000.

The capital of the Commercial Bank of Savannah, Ga., is reported to have been increased from \$50,000 to \$100,000. J. H. Entelman is president.

It is reported that Martin & Raine, bankers, Memphis, Tenn., have filed an

[For Additional Financial News, See Page 72.]



**\$100,000 High-Grade 7% Preferred Stocks**  
In strongest Southern Cotton Mills.  
**\$50,000 6% First Mortgage Bonds**  
on modern Southern Cotton Mills.  
For sale by  
**F. C. ABBOTT & CO.** Charlotte, N. C.

Established 1835  
**The Merchants National Bank**  
South and Water Sts., BALTIMORE, MD.  
DOUGLAS H. THOMAS, President.  
WM. INGLE, Vice-Prest. and Cashier.  
J. O. WANDS, Asst. Cashier.  
JOHN B. H. DURN, Asst. Cashier.  
Capital, \$1,500,000  
Surplus and Profits, - - - \$900,000  
Deposits, \$12,000,000  
Accounts of Banks, Bankers, Corporations and  
Individuals solicited. We invite correspondence.

**JOHN NUVEEN & CO.**  
1st. Nat. Bank Bldg., CHICAGO  
We purchase SCHOOL, COUNTY and MU-  
NICIPAL BONDS. Southern Municipal  
Bonds a Specialty.  
Write us if you have bonds for sale.

**SURETY BONDS**  
We issue all kinds:—CONTRACT, FIDELITY, JUDICIAL, OFFICIAL, COURT  
Also BURGLARY INSURANCE

**UNITED SURETY CO.** Home Office, BALTIMORE, MD.  
W. J. GRISWOLD CO. J. L. RILEY & CO. General Agents in all prin-  
Gen. Agents for State of N. C. Gen. Agents for Ga. and Fla. cipal cities in all other  
DURHAM, N. C. Empire Bldg. Southern States.  
ATLANTA GA.

### COUNTY, SCHOOL AND MUNICIPAL OFFICIALS AND CONTRACTORS

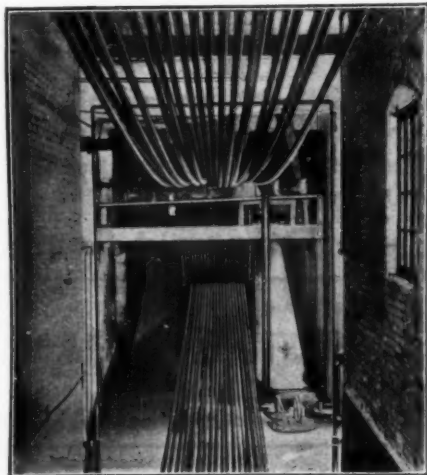
Write us whenever you have bonds for sale  
We are always in the market

Address Correspondence to

**T. H. SAUNDERS, Manager Bond Department**  
**First National Bank** **Cleveland, Ohio**

## "AMERICAN"

Slipless Driving  
Noiseless Driving



Power transmission by  
means of "American"  
Rope is accomplished ab-  
solutely without slip and  
almost without sound.

The cheapest, most  
efficient and, in every  
technical and practical  
respect, the most satis-  
factory of all known  
means for the distribu-  
tion of power,

It will pay you to  
study the manifold advantages of this subject.

Write for our "Blue Book of Rope Transmission."

**The American Manufacturing Co.**  
65 WALL STREET, NEW YORK CITY

**TRANSMISSION ROPE**

**Hugh MacRae & Co.**  
BANKERS  
MISCELLANEOUS SOUTHERN SECURITIES  
COTTON MILL STOCKS  
WILMINGTON, N. C.  
WASHINGTON, D. C. 408 Colorado Bldg.

Atlanta, Birmingham & Atlantic 5's  
Belt R. R. of Chattanooga 5's  
Florida West Shore 5's  
And all Steam Railroad Securities dealt in.  
**F. J. LISMAN & CO.**  
Specialists in Steam R. R. Securities  
Members New York Stock Exchange  
30 Broad Street NEW YORK  
State Savings Bank Bldg., Hartford  
Land Title & Trust Bldg., Philadelphia

**THE FIRST NATIONAL BANK**  
OF KEY WEST, FLA.  
United States Depository and Disbursing Agent  
Capital, - - - \$100,000  
Surplus and Undivided Profits, - 40,000  
A general banking business transacted.  
Special attention given to collections.

## INTERNATIONAL TRUST CO. OF MARYLAND

BALTIMORE, MD. Capital and Surplus, \$2,500,000  
MAKES A SPECIALTY OF SOUTHERN BUSINESS

PRIVATE, State and National Bank Accounts. Cotton  
Mill Accounts. Estate Administration. Accounts in-  
vited from General Manufacturers and Business Men.  
High-Class Bonds and Other Forms of Investment. Interest  
Allowed on Deposits Subject to Check and Special Rates Made  
on Time Deposits. Your Business is Solicited. Correspond-  
ence Invited.

### OFFICERS

DOUGLAS H. GORDON,  
President  
SUMMERFIELD BALDWIN,  
Vice-President  
SAMUEL C. ROWLAND,  
Vice-President  
CHAS. D. FENHAGEN,  
Secretary and Treasurer  
WALTER D. FOCKE,  
Asst. Sec. and Asst. Treas.

### EXECUTIVE COMMITTEE

ISAAC H. DIXON, Chairman  
SUMMERFIELD BALDWIN,  
RICHARD H. EDMONDS,  
SAMUEL C. ROWLAND,  
WM. C. SEDDON,  
DOUGLAS H. GORDON,  
STEVENSON A. WILLIAMS

A Progressive and Conservative Trust and Banking Institution.

### THE BALTIMORE TRUST & GUARANTEE COMPANY

BALTIMORE, MD.  
Capital, - - - \$800,000  
Surplus, - - - \$2,100,000  
THOS. H. BOWLES, President  
Acts as Executor, Administrator,  
Trustee, Receiver for Firms, Individ-  
uals or Corporations.  
Receives Deposits subject to Check,  
and allows Liberal Rates of Interest  
thereon.

### MANUFACTURERS AND JOBBERS

Frequently find it necessary to have  
BANKING FACILITIES in addition  
to those offered by local banks.

### The First National Bank OF RICHMOND, VA.

With  
ASSETS OF  
**NINE MILLION DOLLARS**  
offers just the ADDITIONAL facilities required.  
JNO. B. PURCELL, JNO. M. MILLER, Jr.,  
President. Vice-Pres. and Cashier.

**John L. Williams & Sons**  
Cor. 9th & Main Sts. BANKERS RICHMOND, VA.  
DEALERS IN  
**HIGH-CLASS SECURITIES**  
Negotiate Entire Issues of Bonds for States, Cities  
and Railroad Corporations.  
Foreign Exchange Bought and Sold.

### JOHN W. DICKEY

SOUTHERN  
SECURITIES  
AUGUSTA, GEORGIA

### INVESTMENT SECURITIES

Southern Stocks and Bonds  
Municipal and Corporation  
Cotton Mill Stock a Specialty  
WM. S. GLENN - Broker - SPARTANBURG, S. C.

### MARK PACKARD COAL OPERATOR - BUFFALO, N. Y.

Invites correspondence with parties desirous  
of investing in coal developments on the  
Cumberland Plateau, Tenn.  
\$45,000 of Cross Creek Coal Co. 6%  
Gold Bonds, covering 7000 acres of  
Battle Creek Coal, for sale. Most at-  
tractive investment in the South.  
Best coal, best market and best facilities  
in the South.  
OFFICERS:  
BUFFALO, N. Y. CHATTANOOGA, TENN.  
WELCH, W. VA.

### The National Exchange Bank OF BALTIMORE, MD.

Hopkins Placo, German and Liberty Sts.  
Capital, \$1,000,000  
July 15, 1908, Surplus and Profits, \$671,631.60  
OFFICERS:  
WALDO NEWCOMER, President.  
SUMMERFIELD BALDWIN, Vice-Pres.  
CHARLES W. DORSETT, Vice-Pres.  
R. VINTON LANDSALE, Cashier.  
WM. J. DELCHER, Asst. Cashier.  
Accounts of Mercantile Firms, Corporations,  
Banks, Bankers and Individuals Invited.

### MERCANTILE TRUST AND DEPOSIT COMPANY

OF BALTIMORE.  
N. E. Corner German and  
Calvert Streets.  
Capital Stock and  
Surplus.....\$5,948,449  
Deposits.....\$7,900,000  
Resources.....\$13,850,913

This Company solicits  
deposit accounts from  
Banks, Corporations and  
Individuals, and allows  
interest thereon at lib-  
eral rates conforming to  
conservative business.  
We invite correspond-  
ence and personal inter-  
views, and will be pleased  
to furnish information to  
those parties who desire  
to make deposits with us.  
JOHN GILL, President.

### GO SOUTH!

For Business Opportunities, Investment  
Securities, Real Estate, Timber, Mines,  
Industrial Properties and Farm, Town or  
City Mortgages in all parts of the South,  
correspond with  
METROPOLITAN INVESTMENT CO.  
GEO. B. EDWARDS, President, Charleston, S. C.  
New York Office, Beaver Bldg., 62-92 Beaver St.  
Branch Office in London, England

### SURETY BONDS

**Fidelity & Deposit Co.**  
OF MARYLAND  
Home Office, - BALTIMORE, MD.  
Assets Over \$5,000,000

Pioneer Surety Co. of the South.  
Becomes Surety on bonds of every de-  
scription.

### AGENTS IN ALL PRINCIPAL CITIES

HARRY NICODEMUS, Sec'y and Treas. EDWIN WARFIELD, President

amendment to their charter, increasing the capital from \$7500 to \$25,000.

The United States Fire Insurance Co. of Nashville, Tenn., is reported to have filed an amendment to its charter, changing its name to the Capital Fire Insurance Co.

The Georgia Fire Insurance Co. of Cedartown, Ga., is reported to have been granted an amendment to its charter to increase its capital from \$100,000 to \$300,000.

Including the Realty Trust Co. of Atlanta, which has a capital of \$600,000, there were granted in Georgia during 1908 19 bank charters, with a total capital of \$1,630,000.

Reports state that the stockholders of the Virginia National Bank of Petersburg, Va., have authorized an increase in the capital from \$300,000 to \$500,000. Augustus Wright is president.

A condensed statement of 186 banks in Louisiana at close of business December

22, 1908, shows loans and discounts, \$56,448,377; due from banks and bankers, \$14,621,316; capital stock paid in, \$14,066,907; surplus, \$7,440,543; undivided profits, less expenses and taxes paid, \$2,464,775; due to other banks and bankers, \$9,900,264; individual savings deposits, \$17,631,472; individual deposits subject to check, \$36,639,779; time and demand certificates of deposit, \$3,509,999; certificates of deposit for borrowed money, \$81,215; total resources, \$97,949,320.

Your letter-head tells a story quite apart from the message written upon it.

It suggests your character, your reliability, and helps the recipient to make up his mind whether he will do business with you.

Specify

### Old Hampshire Bond

"Look for the Water Mark"

to your printer. The clean, crisp sheets will tell the right story—the story you would tell if you could meet your man face to face.

OLD HAMPSHIRE BOND is the standard paper for the better grade of business stationery. It is used by the better grade of business houses. A sample book will gladly be mailed upon request.

Hampshire Paper Company

The only paper makers in the world making bond paper exclusively.

South Hadley Falls Massachusetts



### The Delaware Fidelity Trust Co.

Home Office—Dover, Delaware

Announces the opening of a branch office in the City of Philadelphia, where arrangements may be made for the organization and consolidation of corporations, registration of stock, and for acting as trustee in bond issues. The company will assist substantial industrial enterprises requiring additional capital, and is especially interested in the industrial development of the South.

Correspondence solicited.

THE DELAWARE FIDELITY TRUST CO.  
224 S. Broad St., Philadelphia, Pa.

### BUY STOCKS

That are guaranteed dividend-payers, upon which you can borrow or demand 75 per cent. of their par value. I offer such an opportunity at a low price that will, in my judgment, double in value. Full information upon request.

F. S. GIBSON,  
848 Drexel Building, Philadelphia.

## Bank of Richmond

Capital and Surplus, \$1,500,000

RICHMOND, VA.

JOHN SKELTON WILLIAMS, President.  
FRED'K E. NOLTING, 1st Vice-President.  
T. K. SANDS, 2d Vice-President and Cashier.  
H. A. WILLIAMS, Assistant Cashier.  
L. D. CRENSHAW, Jr., Trust Officer.

In aiding the development of legitimate business enterprises, this bank believes that it performs a required duty, and to this end offers the services of a live, progressive bank, conservatively managed.

### H. T. HOLTZ & CO.

COUNTY, CITY, TOWN  
AND SCHOOL BONDS

171 LA SALLE ST. CHICAGO

## INVEST IN THE SOUTH

We own and offer carefully selected Southern investment securities yielding attractive rates of interest.

### Interstate Trust & Banking Co.

NEW ORLEANS

Capital and Surplus Over One Million Dollars

WRITE FOR PARTICULARS

THE COST OF

### INCORPORATING

under the Delaware Law has been greatly reduced. The annual tax for 1907 has been decreased 50%. Beginning with 1908, the State tax will be \$5.00 per year for small companies and not over \$50.00 for \$1,000,000 of capitalization. For Sixth Edition of "Pointers," Estimates of Cost, Forms, etc., apply to

DELAWARE TRUST CO.  
WILMINGTON, DEL.

## THE AMERICAN AUDIT CO.

THOS. P. HOWARD, C. P. A., Resident Manager.

Mutual Building, RICHMOND, VA.

Our reports are accepted by the leading financiers of the world, and are frequently made the basis of credit.

Home Office, 100 Broadway, New York

Branches in all Principal Cities

## POCAHONTAS COAL

Attention is called to the securities of the Atlas-Pocahontas Coal Company, also the stock of the Standard Pocahontas Coal Company. Both operations located on the main line of the Norfolk & Western R. R., in McDowell County, W. Va. Both companies are desirous of interesting mill owners and jobbers, especially those located in the Carolinas. Address MARK PACKARD, Offices: Buffalo, N. Y., Chattanooga, Tenn., and Welch, W. Va.

## RICHARD A. BLYTHE COTTON WARPS AND YARNS

No. 114 Chestnut Street, PHILADELPHIA, PA.

1018 Century Bldg., Atlanta, Ga., W. H. Harris, Representative.  
Hawes Bros. & Blythe, Fall River, Mass.

### WE MANUFACTURE AND SELL MORE POST-CARDS

THAN ANY HOUSE SOUTH OF THE MASON AND DIXON LINE  
ONE TO FOUR COLORS, FROM PHOTOGRAPHS  
PRICES ON APPLICATION GIVE US A TRIAL

J. P. BELL COMPANY, Inc.  
LYNCHBURG, VA.

## SOUTHERN INVESTMENTS AND FACTORY LOCATIONS

Private investors desiring investments in the South in the way of real estate, real estate bonds and mortgages, or manufacturers desiring a location for a new plant or change for old plant, are requested to write us for information. South Georgia offers splendid opportunities for manufacturing enterprises. Plenty of labor, raw material, climate good all year around and strong local support given to new plants.

## COOK & CO., - Fitzgerald, Georgia

Incorporated Under Special Act of Legislature

## BALTIMORE AUDIT COMPANY

1027-1029 Calvert Bldg., BALTIMORE, MD.

All work executed by or under direct supervision of Certified Public Accountants

## "CAMCO"

Improved Steel Ceilings are in a class by themselves, being the profit-sharing kind. They allow the largest profit because they are easier to erect, fit better and give a neater appearing job when completed. No alterations on account of bad alignment or bad joints, because the construction is right. Send today for our book of beautiful designs and prices. A postal will do.

## THE CANTON ART METAL COMPANY

CANTON, OHIO

NEW YORK OFFICE, 525 W. 23d STREET

## FISK & ROBINSON

BANKERS

Government Bonds  
Investment Securities

Members New York Stock Exchange

### SPECIAL LIST OF CURRENT OFFERINGS ON APPLICATION

NEW YORK BOSTON CHICAGO  
35 Cedar St. 28 State St. 115 Adams St.

### ACCOUNTS SOLICITED

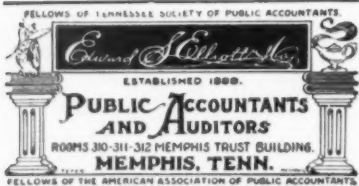
DIXIE BROKERAGE CO.

### Buying and Selling Agents

Produce and Provisions

111 N. WATER ST.

WILMINGTON, N. C.



Wm. F. Bockmiller, Pres. John G. Hallett, Sec.  
**Baltimore Office Supply Co.**  
106 S. Eutaw St., Baltimore, Md.

MANUFACTURERS OF  
Stamps, Stencils, Seals, Metal Signs, etc.  
Office and Bank Supplies.  
Write for prices.

Reports and Adjustments. Rating on Individuals  
Collections a Specialty.

### Southern Credit & Collection Association

419 FOURTH ST.

MACON, GA.

## Eureka Fire Hose Mfg. Co.



TRADE MARK

Awarded Gold Medal  
at the St. Louis  
Exposition 1904.

13 Barclay St.  
NEW YORK.

ORIGINAL MANUFACTURERS OF  
SEAMLESS RUBBER LINED

### COTTON FIRE HOSE

Also the Celebrated Brands of Eureka Mill Hose, Eureka Underwriters' Linen, Eureka Garden Hose, Eureka U. S. Brand Linen Hose, Plain and Rubber Linen, Trojan Mill Hose, Gem Garden Hose. Agencies—New York, N. Y.; Philadelphia, Pa.; Dallas, Texas; Seattle, Wash.; Boston, Mass.; Columbus, Ohio; Minneapolis, Minn.; Syracuse, N. Y.; Chicago, Ill.; Atlanta, Ga.; Denver, Col.; Detroit, Mich.



# The Home Insurance Co.

OFFICE, No. 56 CEDAR STREET  
NEW YORK

ONE HUNDRED-AND-ELEVENTH SEMI-ANNUAL STATEMENT

JANUARY, 1909

## SUMMARY OF ASSETS:

	Par Value.	Market Value.
Cash in Banks and Trust Companies.....		\$1,765,003 75
Real Estate.....		1,543,892 06
United States Bonds.....	\$1,210,000 00	1,352,000 00
State and City Bonds.....	4,158,333 33	4,126,833 33
Railroad Bonds.....	5,187,000 00	5,112,600 00
Miscellaneous Bonds.....	500,000 00	420,000 00
Railroad Stocks.....	5,506,000 00	7,602,120 00
Miscellaneous Stocks.....	1,000,000 00	1,378,000 00
Bank and Trust Co. Stocks.....	115,000 00	338,000 00
Bonds and Mortgages, being first lien on Real Estate.....		97,800 00
Premiums uncollected and in hands of Agents.....		1,120,249 91
		<b>\$24,856,499 05</b>

## LIABILITIES:

Cash Capital.....	\$3,000,000 00
Reserve Premium Fund.....	9,515,887 00
Reserve for Losses.....	1,018,626 87
Reserve for Re-Insurance and other claims.....	539,163 67
Reserve for Taxes.....	100,000 00
Reserve as a Conflagration Surplus.....	800,000 00
Surplus over contingencies and all liabilities, including capital.....	9,882,821 51
	<b>\$24,856,499 05</b>

Surplus as regards policyholders, - **\$13,682,821.51**

## DIRECTORS:

LEVI P. MORTON, CORNELIUS N. BLISS, JOHN H. WASHBURN, ELBRIDGE G. SNOW, GEORGE H. HARTFORD, HENRY F. NOYES, LUCIEN C. WARNER, DUMONT CLARKE, JOHN CLAFLIN, CORD MEYER, LEVI C. WEIR, JOHN H. FLAGLER, EMANUEL H. A. CORREA, SAMUEL D. STYLES.

ELBRIDGE G. SNOW, P. resident

EMANUEL H. A. CORREA, Vice-President  
FREDERIC C. BUSWELL, Vice-President  
CLARENCE A. LUDLUM, Ass't Secretary  
AREUNAH M. BURTIS, Secretary  
CHARLES L. TYNER, Secretary  
HENRY J. FERRIS, Ass't Secretary

Your especial attention is called to the creation by this Company of a *Conflagration Surplus* now amounting to \$800,000, a sum exceeding the entire assets of many companies seeking business in the United States and Canada, and the only Company doing business in this country maintaining a reserve of this character, rendering substantial its claims to being "conflagration proof." And we also call your attention to the Policyholders' Surplus of this Company, larger than that of any other company transacting the business of fire insurance in the United States.

This should command the attention and patronage of the insuring public, not only the manufacturer and the merchant, but the city and town corporations and the householder.

New York, January 12, 1909.

## HOTEL BELVEDERE

BALTIMORE, MD.

EUROPEAN FIREPROOF



Within five blocks Pennsylvania Railroad, Union Station, and Baltimore & Ohio Railroad, Mt. Royal Station.

In the center of the residential section.

Only ten minutes' ride to the business section and all steamboat lines.

## RATES

\$2.00 Per Day and Upwards

## NEW ORLEANS

THE GATEWAY OF THE MISSISSIPPI  
THE GREAT CITY OF THE GREAT SOUTH

The Largest Cotton, Rice and Sugar Market in the World—The Most Popular Winter Resort in America—Hunting and Fishing—Golf Links—Comfort—Health—Pleasure

... ELEVEN THEATRES ...

## New St. Charles Hotel

Modern — Fire-Proof — First-Class

Accommodating 1000 Guests

Turkish, Russian, Roman, Electric and Plain Baths.  
Luxurious Sun Baths and Palm Garden.

ANDREW R. BLAKELY & COMPANY, Limited  
PROPRIETORS

## Our Leading Combinations

MANUFACTURERS' RECORD.....	\$4.00	OUR PRICE
Review of Reviews.....	3.00	
McClure's.....	1.50	<b>\$5.60</b>
	<b>\$8.50</b>	

MANUFACTURERS' RECORD.....	\$4.00	OUR PRICE
World's Work.....	3.00	
Everybody's.....	1.50	<b>\$5.60</b>
	<b>\$8.50</b>	

MANUFACTURERS' RECORD.....	\$4.00	OUR PRICE
World Today.....	1.50	
Technical World.....	1.50	<b>\$5.35</b>
	<b>\$7.00</b>	

MANUFACTURERS' RECORD.....	\$4.00	OUR PRICE
Christian Endeavor World.....	1.50	
McClure's.....	1.50	<b>\$5.35</b>
	<b>\$7.00</b>	

MANUFACTURERS' RECORD		
With Scribner's Magazine, \$6.00.		
With Current Literature and McClure's, \$5.00.		
With Current Literature and Woman's Home Companion, \$5.35.		
With Current Literature and Success, \$5.35.		
With Dellneator and Everybody's, \$4.85.		
With Designer OR New Idea, Modern Priscilla, \$4.00.		
With Designer OR New Idea, McClure's, Modern Priscilla, \$4.90.		
With Etude, American OR Success, \$4.85.		
With Etude and Cosmopolitan, \$4.85.		
With Etude and McClure's, \$5.10.		
With Etude and Woman's Home Companion, \$4.85.		
With Everybody's, World's Work, Dellneator, \$6.50.		
With Ladies' World, Farm and Home, Good Literature and Paris Modes and Patterns, \$4.00.		
With Ladies' World, Pictorial Review, Modern Priscilla, \$4.35.		
With McClure's and Modern Priscilla, \$4.80.		

MANUFACTURERS' RECORD.....	\$4.00	OUR PRICE
Review of Reviews.....	3.00	
Woman's Home Comp'n.....	1.25	<b>\$5.35</b>
	<b>\$8.25</b>	

MANUFACTURERS' RECORD.....	\$4.00	OUR PRICE
Dellneator.....	1.00	
World's Work.....	3.00	
Everybody's.....	1.50	<b>\$6.50</b>
	<b>\$9.50</b>	

MANUFACTURERS' RECORD.....	\$4.00	OUR PRICE
Home Herald.....	2.00	
Woman's Home Comp'n.....	1.25	<b>\$5.35</b>
	<b>\$7.25</b>	

MANUFACTURERS' RECORD.....	\$4.00	OUR PRICE
Outing Magazine.....	3.00	
Recreation.....	3.00	
Field and Stream.....	1.50	<b>\$6.90</b>
	<b>\$11.50</b>	

ASK FOR OUR 64-PAGE CLUBBING CATALOGUE. MAIL ALL ORDERS TO  
**The Grumlaux News & Subscription Co., Le Roy, N. Y.**

## ALPHABETICAL INDEX OF ADVERTISERS.

FOR "CLASSIFIED OPPORTUNITIES" See Pages 76 and 77

Ads. marked \* appear every other week. Ads. marked † appear in first issue of the month. Ads. marked ‡ not in this issue

<p><b>A</b></p> <p>Abbott &amp; Co., F. O. 71</p> <p>Abendroth &amp; Root Mfg. Co. 4, 106</p> <p>Abrasive Material Co. 9</p> <p>Address 3338 17th St., N. W., Washington, D. C. 78</p> <p>Albany Steam Trap Co. 116</p> <p>Alberger Condenser Co. 9</p> <p>Alberger Pump Co. 9</p> <p>Alpha Photo-Engraving Co. 33</p> <p>Alpha Portland Cement Co. 22</p> <p>Alpha Slate Co., The. 36</p> <p>Aising Engineering Co., J. R. 8</p> <p>Aluminum Co. of America. 99</p> <p>American Air Compress. Wks. 89</p> <p>American Audit Co., The. 72</p> <p>American Blower Co. 87</p> <p>American Bolting Cloth Co. 100</p> <p>American Bridge Company of New York. 102</p> <p>American Cast Iron Pipe Co. 106</p> <p>American Cement Co. 22</p> <p>American Conduit Mfg. Co. 114</p> <p>American Cotton Oil Co. 110</p> <p>American Engine Co. 4</p> <p>American Frog &amp; Switch Co. 83</p> <p>American Hoist &amp; Derrick Co. 95</p> <p>American Injector Co. 9</p> <p>American Iron &amp; Steel Mfg. Co. 40</p> <p>American Laundry Machinery Mfg. Co. 41</p> <p>American Locomotive Co. 87</p> <p>American Luxfer Prism Co. 37</p> <p>American Machine Co. 15</p> <p>American Mfg. Co. 71</p> <p>American Pipe Mfg. Co. 106</p> <p>American Process Co. 22</p> <p>American Pulley Co., The. 15</p> <p>American Pulverizer Co. 100</p> <p>American Railway Supply Co. 75</p> <p>American Rolling Mill Co. 34</p> <p>American Safety Lamp, Mine &amp; Supply Co. 108</p> <p>Amer. Saw Mill Mch. Co. 108</p> <p>American Sheet &amp; Tin Plate Co. 108</p> <p>American Spiral Pipe Works. 106</p> <p>American Steel &amp; Wire Co. 25</p> <p>American Stone Co. 20</p> <p>American Supply Co. of Providence, R. I. 109</p> <p>American Valve &amp; Meter Co. 108</p> <p>American Water Softener Co. 20</p> <p>American Well Works. 105</p> <p>Ames &amp; Co., W. 1</p> <p>Anderson, South Carolina. 111</p> <p>Anderson Machine &amp; Foundry Co. 40</p> <p>Andrews, Perry. 105</p> <p>Angier, John C. 79</p> <p>Angular Co., The. 1</p> <p>Armature Mfg. Co. 38</p> <p>Arnold Co., The. 18</p> <p>Artesian Well &amp; Supply Co. 103</p> <p>Arundel Sand &amp; Gravel Co. 20</p> <p>Ash Grove Lime &amp; Portland Cement Co. 22</p> <p>Atlanta, B'ham &amp; Atlantic R.R. 113</p> <p>Atlanta Steel Co. 28</p> <p>Atlanta Utility Works. 100</p> <p>Atlantic Electric Co., Inc. 113</p> <p>Atlantic Equipment Co. 82</p> <p>Atlas Machine Co. 16</p> <p>Atlas Portland Cement Co. 23</p> <p>Audit Co. of New York, The. 8</p> <p>Austin Mfg. Co. 101</p> <p>Austin-Western Co., Ltd. 85</p>	<p><b>B</b></p> <p>Babcock &amp; Wilcox Co. 8</p> <p>Badger &amp; Sons Co., E. B. 110</p> <p>Bailey-Libby Co. 116</p> <p>Baldwin Equip. &amp; Supply Co. 82</p> <p>Baldwin Locomotive Works. 87</p> <p>Ball Engine Co. 4</p> <p>Baltimore Audit Co. 72</p> <p>Baltimore Bell Co. 1</p> <p>Baltimore Bridge Co. 32</p> <p>Baltimore Cooperage Co. 102</p> <p>Baltimore Office Supply Co. 72</p> <p>Baltimore Steam Packet Co. 105</p> <p>Baltimore Trust &amp; Guarantee Co. 71</p> <p>Band &amp; Myers. 18</p> <p>Bank of Richmond. 72</p> <p>Banner Electric Co., The. 8</p> <p>Barker, Harry T. 18</p> <p>Barnard &amp; Leas Mfg. Co. 35</p> <p>Barnett Co., G. &amp; H. 116</p> <p>Barnett Mfg. Co. 1</p> <p>Barron, J. S. 8</p> <p>Bartlett &amp; Snow Co., C. O. 16</p> <p>Bates' Sons, James. 16</p> <p>Bay State Iron Works. 4</p> <p>Behlen, C. 81</p> <p>Bell Company, Inc., J. F. 72</p> <p>Belmont Iron Works, Inc. 32</p> <p>Benjamin Electric Mfg. Co. 75</p> <p>Bennett Rub. Stamp &amp; Seal Co. 75</p> <p>Bertsch &amp; Co. 80</p> <p>Bird &amp; Son, F. W. 36</p> <p>Birmingham Rail &amp; Loco. Co. 82</p> <p>Blaisdell Mch. Co. 89</p> <p>Blake Mfg. Co., The Geo. F. 4</p> <p>Blanchard &amp; Spring. 18</p> <p>Bliss Co., E. W. 12</p> <p>Block-Pollak Iron Co. 84</p> <p>Blythe, Richard A. 72</p> <p>Boiles Iron &amp; Wire Works, J. E. 33</p> <p>Boomer &amp; Boschert Press Co. 75</p> <p>Borst &amp; Company. 18</p> <p>Bourne-Fuller Co. 42</p>	<p><b>C</b></p> <p>Caldwell &amp; Sons Co., H. W. 4</p> <p>Caldwell &amp; Topping. 78</p> <p>Caldwell Co., Inc., W. E. 16, 105</p> <p>Calumet Steel Co. 22</p> <p>Camelot Septic Tank Co. 20</p> <p>Cameron Stp. Pump Wks. A.S. 8</p> <p>Cameron &amp; Barkley Co. 81</p> <p>Campbell, Thos. J. 72</p> <p>Canton Art Metal Co., The. 72</p> <p>Carbide Machine Co. 1</p> <p>Carborundum Co. 108</p> <p>Cardwell Machine Co. 108</p> <p>Carlson's Sons Co., Thomas. 91</p> <p>Carriage Steel Co. 21</p> <p>Carnel, George. 75</p> <p>Carroll &amp; Sons, Wm. 10</p> <p>Carroll's Ice Mach. Co., The. 10</p> <p>Carroll's Portland Cement Co. 22</p> <p>Carroll's Iron Works. 5</p> <p>Carroll's Tap &amp; Die Co., J.M. 99</p> <p>Carroll's Superior Limestone Co. 20</p> <p>Carver Cotton Gin Co. 109</p> <p>Carver File Co. 116</p> <p>Cary Spring Works. 91</p> <p>Cassidy, Joseph Huntley. 18</p> <p>Cassidy, Curran &amp; Hall. 97</p> <p>Cattell, Charles. 18</p> <p>Central Hotel. 113</p> <p>Central Metal &amp; Supply Co. 8</p> <p>Chambers Bros. Co. 75</p> <p>Charlotte Steel Co. 108</p> <p>Charlotte Plaster Co. 36</p> <p>Chase Fdry. &amp; Mfg. Co. 83</p> <p>Chase Turbine Mfg. Co. 108</p> <p>Chattanooga Boiler &amp; Tank Co. 102</p> <p>Chattanooga Board of Trade. 11</p> <p>Chattanooga Paint Co. 34</p> <p>Chesapeake Belting Co. 15</p> <p>Chesapeake Iron Works. 32</p> <p>Chesapeake Steamship Co. 113</p> <p>Ches. &amp; Ohio Coal &amp; Coke Co. 7</p> <p>Chicago &amp; Alton Railroad Co. 93</p> <p>Chicago Coil Co. 114</p> <p>Chicago Concrete Mach. Co. 26</p> <p>Chicago House Wrecking Co. 81</p> <p>Chicago Pneumatic Tool Co. 15</p> <p>Cincinnati Equip. Co. 83, 84</p> <p>Cincinnati Exh. &amp; Bldg. Pipe Co. 82</p> <p>Cincinnati Frog &amp; Switch Co. 82</p> <p>Citizens Bank of Louisiana. 79</p> <p>Clark &amp; Co., H. W. 103</p> <p>Clark Co., The Geo. P. 24</p> <p>Classified Opportunities. 76, 77</p> <p>Clayton Air Compressor Wks. 4</p> <p>Clelland Belt &amp; Mch. Co. 87</p> <p>Climax Mfg. Co. 87</p> <p>Clinchfield Coal Corporation. 2</p> <p>Cling-Surface Co. 12</p> <p>Clum &amp; Atkinson. 12</p> <p>Cole, E. J. 80</p> <p>Cole-Wilcox Co. 102</p> <p>Cole Mfg. Co., R. D. 102</p> <p>Columbia Incandescent Lamp Co., The. 3</p> <p>Columbian Concrete Steel Bar Co. 16</p> <p>Columbian Rope Co. 16</p> <p>Columbus Forge &amp; Iron Co. 99</p> <p>Columbus Iron Works Co. 7</p> <p>Conard &amp; Co., Thomas P. 80</p> <p>Concord Steel Co., The. 79</p> <p>Cone, Caesar. 79</p> <p>Consolidated Cot. Duck Co. 116</p> <p>Consolidated Fuel Co. 97</p> <p>Consolidated Rosendale Cement Co. 1</p> <p>Consolidation Coal Co. 78</p> <p>Continental Blow Pipe Co. 84</p> <p>Continental Car &amp; Equip. Co. 84</p> <p>Continental Gin Co. 84</p> <p>Continental Natural Gas Co., The. 24</p> <p>Continental Port. Cement Co. 24</p> <p>Contractors' Plant Mfg. Co. 85</p> <p>Conway, J. W. 102</p> <p>Cook &amp; Co. 72</p> <p>Cook's Sons, Adam. 104</p> <p>Cook Well Co. 104</p> <p>Cooper Co., C. &amp; G. 6</p> <p>Corpeand-Ingle Shale Brick Co. 24</p> <p>Corrugated Bar Co. 24</p> <p>Cortright Metal Roofing Co. 37</p> <p>Cotman &amp; Cotman. 14</p> <p>Cotton States Belt &amp; Sup. Co. 110</p> <p>Cowing, John F. 18</p> <p>Crescent Ice Co. 78</p> <p>Cresson Co., George V. 16</p> <p>Crocker-Wheeler Co. 115</p> <p>Croft's Steam Gage &amp; Valve Co. 5</p> <p>Croft's Steel &amp; Cast. Co. 8</p> <p>Cutler Manufacturing Co. 102</p> <p>Cyclone Drill Co. 102</p> <p>Cypress Lumber Co. 102</p>	<p><b>D</b></p> <p>Dake Engine Co. 93</p> <p>Dallas, Park. 18</p> <p>Dallman &amp; Cooper Supply Co. 38</p> <p>Dart Mfg. Co., E. M. 4</p> <p>Davenport Locomotive Works. 87</p> <p>Davis, Frank. 87</p> <p>Davis Drilling &amp; Prospecting Co. 1</p> <p>Davis Foundry &amp; Mach. Wks. 105</p> <p>Davis &amp; Son, G. M. 102</p> <p>Davis-Urwick Co., Inc. 102</p> <p>Dayton Globe Iron Wks. Co. 105</p> <p>Dea Bros. Steam Pump Wks. 106</p> <p>Decker Co., The. 39</p> <p>Declar Cor. &amp; Roofing Co., Inc. 39</p> <p>DeLaval Steam Turbine Co. 108</p> <p>Delaware Fidelity Trust Co. 72</p> <p>Delaware Trust Co. 72</p> <p>Denary, Wm. S. 72</p> <p>Deming Co., The. 105</p> <p>Des Moines Bridge &amp; Iron Co. 33</p> <p>Desmond-Stephan Manfg. Co. 9</p> <p>Detroit Graphite Co. 42</p> <p>Detroit Leather Specialty Co. 9</p> <p>Detroit Lubricator Co. 9</p> <p>Devine Co., J. P. 42</p> <p>Diamond Rubber Co., The. 14</p> <p>Dicker, John W. 14</p> <p>Dixie Portland Cement Co. 22</p> <p>Dixie Separator Co. 106</p> <p>Dixie Brokerage Co. 72</p> <p>Dixie Electro Magnet Co. 110</p> <p>Dixie Portland Cement Co. 22</p> <p>Dixon Crucible Co., Joseph. 75</p> <p>Dixie Seal &amp; Stamp Co. 110</p> <p>Dixie Portland Cement Co. 22</p> <p>Dodge &amp; Day. 18</p> <p>Dodson &amp; Co., J. F. 82</p> <p>Dolan &amp; Barrett. 84</p> <p>Douglas &amp; Hill Electric Co. 114</p> <p>Dow Wire &amp; Iron Works Co. 33</p> <p>Draper Co. 109</p> <p>Draper, R. W. 78</p> <p>Druid Oak Works. 13</p> <p>Dr. Bole's Iron Works. 103</p> <p>Dufur, Bagrot &amp; Co. 33</p> <p>Dufur &amp; Co. 33</p> <p>Dunlevie, E. V. 78</p> <p>Dunlop &amp; Co. 33</p> <p>DuPont De Nemours Powder Co., E. L. 97</p> <p>Eagle Wagon Works. 84</p> <p>East Bangor Cons. State Co. 36</p> <p>Eastern Railway Supply Co. 83</p> <p>Easton Fdry. &amp; Mch. Co. 99</p> <p>Eco Magneto Clock Co. 75</p> <p>Econom Electric Co., The. 10</p> <p>Edison Portland Cement Co. 23</p> <p>Edwards Manufacturing Co. 39</p> <p>Edgerton, Howard. 18</p> <p>Electric Cable Co. 113</p> <p>Electric Supply Co. 114</p> <p>Electric Supply Co., Edward S. 72</p> <p>Emerson Steam Pump Co. 104</p> <p>Enterprise Electric Co., The. 113</p> <p>Erwin &amp; Co., A. B. 10</p> <p>Erwin &amp; Co. 10</p> <p>Erwin, W. A. 78</p> <p>Eureka Fire Hose Mfg. Co. 72</p> <p>Eureka Iron Works. 33</p> <p>Evans Marble Co. 18</p> <p>Ewing Merkle Electric Co. 18</p> <p>Expanded Metal &amp; Corrugated Bar Co. 26</p> <p>Fabriz Metal Co. 6</p> <p>Fairbanks Steam Shovel Co. 93</p> <p>Fairmont Coal Co. 1</p> <p>Fairmount Iron &amp; Steel Co. 114</p> <p>Fendler &amp; Co., A. B. 10</p> <p>Fernholtz Brick Mch. Co. 75</p> <p>Ferracute Mch. Co. 12</p> <p>Fidelity &amp; Deposit Co. of Md. 71</p> <p>Finley &amp; Co., Inc., A. W. 113</p> <p>First Nat'l Bank of Cleveland 71</p> <p>First Nat'l Bank of Richmond 71</p> <p>Fisher &amp; Davis. 14</p> <p>Fisher Leather Belting Co. 14</p> <p>Fisk &amp; Robinson. 72</p> <p>Fleet-McGinley Co. 72</p> <p>Flexible Compound Co. 5</p> <p>Flood &amp; Co. 12</p> <p>Flood Gas Engine Co., The. 12</p> <p>Flood Mfg. Co., The. 108</p> <p>For Wayne Electric Works. 114</p> <p>Fortoria Incandescent Lamp Co. 39</p> <p>Fox &amp; Co., M. Ewing. 39</p> <p>Fox, John D. 18</p> <p>Frank, J. E. 82</p> <p>Freeman &amp; Sons Mfg. Co., S. 8</p> <p>Freese &amp; Co., E. M. 75</p> <p>Frederick &amp; Co. 10</p> <p>Frederick &amp; Robertson. 19</p> <p>Galea-Signal Oil Co. 11</p> <p>Gainesville Iron Works. 11</p> <p>Galt &amp; Son, John. 13</p> <p>Gandy Belting Co. 13</p> <p>Gardner &amp; Howe. 78</p> <p>Gardner Governor Co. 104</p> <p>Gas &amp; Water Works. 10</p> <p>Gatchell &amp; Manning. 19</p> <p>General Building Supply Co. 20</p> <p>General Compressed Air &amp; Vacuum Mch. Co. 89</p> <p>General Electric Co. 113</p> <p>General Fire Extinguisher Co. 102</p> <p>Genuine Bangor Slate Co. 36</p> <p>Georgia Bur. of Indus. &amp; Immig. 112</p> <p>Georgia Car. Co. 83</p> <p>Georgia Locomotive Co. 83</p> <p>Gibbs Machinery Co. 33</p> <p>Gibson, F. S. 72</p> <p>Gilman's Pipe &amp; Fdry. Co. 106</p> <p>Glen, Wm. S. 106</p> <p>Golden's Foundry &amp; Mach. Co. 12</p> <p>Go-Ro Mfg. Co. 20</p> <p>Goulds Manufacturing Co. 103</p> <p>Graton &amp; Knight Mfg. Co. 15</p> <p>Gravel, Wm. S. 10</p> <p>Greaves, Klusman &amp; Co. 99</p> <p>Green Fuel Economiser Co. 9</p> <p>Greensboro Boiler &amp; Mch. Co. 81</p> <p>Greensboro Supply Co. 81</p> <p>Greenwood Co., E. &amp; R. 72</p> <p>Gregory Electric Co., The. 81</p> <p>Gregory-Spencer Co., The. 81</p> <p>Groner, J. C. 78</p> <p>Grumiaux News &amp; Subscription Co., The. 75</p> <p>Grumiaux, The. 75</p> <p>Grumiaux, The. 75</p> <p>Gulford Crocking Co. 35</p> <p>Gulf Refining Co. 11</p> <p>Gunther-Wright Mch. Co. 1</p>	<p><b>H</b></p> <p>Hales Mfg. Co., Inc., Geo. 9</p> <p>Haines &amp; Sons, M. E. 79</p> <p>Hampshire Paper Company. 72</p> <p>Hartley, James A. 18</p> <p>Hartman Machine Co., C. C. 110</p> <p>Harris Air Pump Co. 10</p> <p>Harrisburg Fdry. &amp; Mch. Wks. 6</p> <p>Hartfelder-Garbutt Co. 14</p> <p>Hartley Boiler Works. 4</p> <p>Hartman Cement Co., Wm. G. 22</p> <p>Haskell-Dawes Machine Co. 1</p> <p>Hastings, Chalkley. 98</p> <p>Haward Co., The. 98</p> <p>Hazelhurst &amp; Anderson &amp; Ed. A. Werner. 19</p> <p>Hazelhurst, Geo. B. 18</p> <p>Hazlet Electric Co. 113</p> <p>Hendon, E. 18</p> <p>Heine Safety Boiler Co. 108</p> <p>Hench &amp; Dromgold Co., The. 108</p> <p>Hendrick Mfg. Co. 101</p> <p>Hepner Co., The. 79</p> <p>Hewett, C. B. 79</p> <p>Heyworth, James O. 95</p> <p>Hicks Locomotive &amp; Car Wks. 84</p> <p>Hoffman, Geo. W. 113</p> <p>Hoffman &amp; Co., R. O. 84</p> <p>Holmes &amp; Co. 20</p> <p>Holmes Co., The. 18</p> <p>Holts &amp; Co., H. T. 72</p> <p>Home Insurance Co. 73</p> <p>Hooker Steam Pump Co. 103</p> <p>Hotel Belvedere. 73</p> <p>Hotel Essex. 75</p> <p>Hotel Patten. 113</p> <p>Houchin-Alken Co. 91</p> <p>Houston, Stanwood &amp; Gamble Co. 106</p> <p>International Lumber Co. 102</p> <p>Howe, J. K. 16</p> <p>Hudson Engineering Co. 103</p> <p>Hughes Specialty Well Drill Co. 103</p> <p>Hunzinger &amp; Terry. 20</p> <p>Hunter Bros. Saw Mfg. Co. 82</p> <p>Hyde Bros. &amp; Co. 82</p> <p>Hydraulic Press Brick Co. 35</p> <p>Hyndman Roofing Co. 35</p> <p>Ideal Electric Co. 113</p> <p>Illinois Central Railroad. 110, 112</p> <p>Illinois Supply Co. 113</p> <p>Imperial Portland Cement Co. 23</p> <p>Independent Pneumatic Tool Co. 89</p> <p>India Alkali Works. 33</p> <p>Indianapolis Switch &amp; Frog Co. 84</p> <p>Ingersoll Band Co. 11</p> <p>Inland Steel Co. 30</p> <p>International Crocking &amp; Construction Co. 35</p> <p>International Filter Co. 85</p> <p>International Lumber Co. 102</p> <p>International Trust Co. of Md. 71</p> <p>Interstate Trust &amp; Bank Co. 72</p> <p>Interstate Iron &amp; Metal Co. 82</p> <p>Iron City Steel Co. 82</p> <p>Ironton Portland Cement Co. 23</p> <p>Isthmian Canal Commis'n. 77</p> <p>Jackman Mfg. Co. 5</p> <p>Jayne, Davis A. 35</p> <p>Jeffrey Mfg. Co. 17</p> <p>Jenkins, George W. 82</p> <p>Jenkins Bros. 116</p> <p>Jewett, Richard &amp; Co. 14</p> <p>Johns-Manville Co., H. W. 9</p> <p>Johnson Co., E. J. 36</p> <p>Jones &amp; Laughlin Steel Co. 30</p> <p>Jones &amp; Co., L. E. 33</p> <p>Kaiser &amp; Co., A. V. 82</p> <p>Kaiser, Louis E. 75</p> <p>Kander &amp; Co., H. 79</p> <p>Kanawha City Elevator Mfg. Co. 17</p> <p>Keller Co., E. 17</p> <p>Kelley Met. Cell. &amp; Mfg. Co., S. 8</p> <p>Kelley &amp; Son, Benj. F. 8</p> <p>Kennett Water Softener Co. 20</p> <p>Kennedy Cabinet Co. 79</p> <p>Keystone Chemical Manufacturing Co. 20</p> <p>Keystone Driller Co. 42, 105</p> <p>Keystone Steel Co. 39</p> <p>Kilbourne &amp; Jacobs Mfg. Co. 2</p> <p>Kilburn, Lincoln &amp; Co. 71</p> <p>Kilby Frog &amp; Switch Co. 82</p> <p>Kilpatrick Bros. Works. 42</p> <p>Kilpatrick Mfg. Co., The. 42</p> <p>Kirwan-Roberts Supply Co. 80</p> <p>Klison Machine Shop. 109</p> <p>Kline, Lewis T. 108</p> <p>Klicker-Baker Co. 41</p> <p>Knobles &amp; Co., Frank A. 4</p> <p>Knobles Steam Pump Works. 104</p> <p>Kriegsaber, V. H. 22</p> <p>La Belle Iron Works. 1</p> <p>Lacey &amp; Co., James D. 79</p> <p>Land-Wharton Co., Inc. 39</p> <p>Lane Mfg. Co. 10</p> <p>Lawrence Cement Co., The. 116</p> <p>Lawrence, J. O. 18</p> <p>Leadsite Company. 18</p> <p>Lee Electric Co. 115</p> <p>Leffel &amp; Co., James. 105</p> <p>Leffler &amp; Co., Chas. 33</p> <p>Lehman, Chas. 80</p> <p>Levy &amp; Co., Henry. 80</p> <p>Lewis &amp; Kitchen. 19</p> <p>Liberty Chair Co. 78</p> <p>Lidgerwood Mfg. Co. 93</p> <p>Liebig &amp; Co., Wm. 33</p> <p>Lima Locomotive Works. 83</p> <p>Linder, H. J. 80</p> <p>Lindley, Walter C. 78</p> <p>Link-Belt Co. 11</p> <p>Link Chain Belt Co. 107</p> <p>Lips &amp; Walcott. 107</p> <p>Lisman &amp; Co., F. J. 71</p> <p>Livermore Foundry &amp; Machine Co., The. 110</p> <p>Lodge &amp; Shipley Mach. Tool Co. 80</p> <p>Long &amp; Allister Co. 12</p> <p>Lookout Boiler &amp; Mfg. Co. 5</p> <p>Loomis Pettibone Co. 19</p> <p>Louisville Fire Works. 35, 78</p> <p>Louisville Fire Brick Works. 78</p> <p>Lovejoy, T. E. 20</p> <p>Lowell Crayon Co. 109</p> <p>Lowell Machine Shop. 108</p> <p>Luckin Company, The. 19</p> <p>Ludlow-Sawyer Wire Co. 41</p> <p>Lynch Rule Co., The. 41</p> <p>Lupton's Sons Co., David. 39</p> <p>Lynn-Superior Co., The. 20</p> <p>Lyon, Edward W. 18</p> <p>Lyon, Young &amp; Co. 78</p>	<p><b>M</b></p> <p>MacKenzie, B. 19</p> <p>MacLear, J. H. 82, 83</p> <p>MacRae &amp; Co., Hugh. 71</p> <p>Males Co. 83</p> <p>Mallory Machinery Co. 80</p> <p>Mankin Construction Co. 19</p> <p>Mar-Del Mobile Co. 80</p> <p>Marshall, J. O. 82</p> <p>Marsh Co. 33</p> <p>Maryland Casualty Co. 6</p> <p>Maryland Portland Cement Co. 23</p> <p>Maryland Ry. &amp; Elec. Supply Co. 83</p> <p>Maryland Terra-Cotta Co. 83</p> <p>Mason Machine Works. 109</p> <p>Masee &amp; Felton Lumber Co. 35</p> <p>Mason Alkali Works. 107</p> <p>Mauney &amp; Son. 22</p> <p>Mayo Knit. Mach. &amp; Needle Co. 8</p> <p>McAdoo, Thomas. 8</p> <p>McAnulty, J. A. 16</p> <p>McCall, H. 40</p> <p>McCall, H. 40</p> <p>McClure, W. J. 78</p> <p>McGill &amp; Co., J. H. 105</p> <p>McGowan Co., John H. 105</p> <p>McIntosh &amp; Co., F. 18</p> <p>McKinnahan Drill Co. 10</p> <p>McLanahan Stone Mach. Co. 100</p> <p>McLaughlin, Pettit &amp; Johnson, 18</p> <p>McLane Pipe Works. 106</p> <p>McLean &amp; Son Mfg. Co. 96</p> <p>Mecklenburg Iron Works. 96</p> <p>Meiser &amp; Son, H. 33</p> <p>Memphis Bridge Co. 11</p> <p>Mercantile Trust &amp; Deposit Co. 71</p> <p>Mercantile &amp; Evans Co. 71</p> <p>Mechanics &amp; Miners Transportation Co. 95</p> <p>Merchants' National Bank of Baltimore. 71</p> <p>Metropolitan Investment Co. 71</p> <p>Meyers Mfg. Co., The Fred. J. 32</p> <p>M. F. 71</p> <p>Mietz, A. 91</p> <p>Milburn, Heister &amp; Co. 18</p> <p>Milstead, F. D. 19</p> <p>Milton Mfg. Co. 40</p> <p>Minneapolis Steel &amp; Mch. Co. 26</p> <p>Miracle Pressed Stone Co. 26</p> <p>Mitchell Clay Mfg. Co. 4</p> <p>Mitchell, John L. 78</p> <p>Noel, R. J. 18</p> <p>Moffatt Machinery Mfg. Co. 15</p> <p>Monarch Road Roller Co. 85</p> <p>Monitor Steam Gen'l. Mfg. Co. 81</p> <p>Moran Flexible Stm. Joint Co. 81</p> <p>Morris &amp; Co. 19</p> <p>Morris, Abbott &amp; Co. 79</p> <p>Morris Machine Wks. 105</p> <p>Morris, O. J. 71</p> <p>Morse Chain Co. 71</p> <p>Morse Twist Drill &amp; Mach. Co. 17</p> <p>Morse, Williams &amp; Co. 17</p> <p>Mundt &amp; Sons, Chas. 101</p> <p>Muralt &amp; Co. 101</p> <p>Murray Iron Works Co. 6</p> <p>Murray, S. W. 79</p> <p>Myers &amp; Bro., F. E. 103</p> <p>Nanz Clock Co., B. 75</p> <p>Nashville Hardwood Floor Co. 1</p> <p>Nashville Mfg. Co. 11</p> <p>National Cast Iron Pipe Co. 102</p> <p>National Exchange Bank of Baltimore, Md., The. 71</p> <p>National Hoisting Eng. Co. 35</p> <p>National Lumber &amp; Crocking Co. 35</p> <p>National Mosaic Flooring Co. 38</p> <p>National Paint Works. 30</p> <p>National Pipe Bending Co. 11</p> <p>National Roofing Co. 39</p> <p>National Tube Co. 9</p> <p>Naylor &amp; Co., S. E. 100</p> <p>New Albany Mfg. Co. 100</p> <p>N. J. Car Spring &amp; Rub. Co. 14</p> <p>N. J. Wire Cloth Co. 103</p> <p>Newman Machine Co. 103</p> <p>New Orleans Roof &amp; Metal Wks. 2</p> <p>Newport News Shipbuilding Co. 2</p> <p>Dry Dock Co. 2</p> <p>New St. Charles Hotel. 14</p> <p>N. Y. Cableway &amp; Eng. Co. 15</p> <p>New York Cent. Jewell Fil. Co. 20</p> <p>New York Revolving Portable Elevator Co. 17</p> <p>N. Y. Switching Works. 84</p> <p>Niagara Falls Met. Stam. Wks. 30</p> <p>Nicholson Fil. Co. 42</p> <p>Nicholson Typewrit. Exchange 75</p> <p>Noel, R. J. 18</p> <p>Nordberg, J. 100</p> <p>Norfolk &amp; Southern Ry. Co. 112</p> <p>Norfolk &amp; Western Ry. 111</p> <p>Northern American Metal Co. 13</p> <p>Northern Carolina Granite Corp. 20</p> <p>Northern Electric Mfg. Co. 14</p> <p>Northern Engineering Works. 89</p> <p>Northern Expanded Metal Co. 25</p> <p>Northern Co. 25</p> <p>Nova Scotia Lumber Co. 26</p> <p>Nuven &amp; Co., John. 71</p> <p>Ober Mfg. Co. 108</p> <p>O'Brien, Frank E. B. 89</p> <p>Ohio Elevator &amp; Machine Co. 41</p> <p>Ohio Laundry Mch. Co. 41</p> <p>Old Dominion Land Co. 116</p> <p>Olive Mfg. Co. 116</p> <p>Olsen, Ole K. 12</p> <p>O'Neill Engineering Co. 78</p> <p>Otis Elevator Co. 37</p> <p>Oswego Bridge Co. 32</p> <p>Oswley, Jr., J. S. 78</p> <p>Packard, Mark. 71, 72</p> <p>Page Engineering Co. 95</p> <p>Park Mfg. Co. 10</p> <p>Parish, A. G. 79</p> <p>Parsons Co., The G. W. 96</p> <p>Patent Valve &amp; Roof Co. 36</p> <p>Patterson, F. T. 36</p> <p>Paulson, Linkum &amp; Co. 10</p> <p>Paxson Co., J. W. 12</p> <p>Peace River Phosphate Mining Co. 80</p> <p>Peacock &amp; Co. 30</p> <p>Peck-Hammond Co. 35</p> <p>Penberthy Injector Co. 18</p> <p>Penniman &amp; Fairley. 18</p> <p>Pennsylvania Steel &amp; Foundry Co. 13</p> <p>Penruddock, E. L. 13</p> <p>Perkins &amp; Frecker. 102</p> <p>Petroleum Iron Works Co. 102</p> <p>Pew, Arthur. 18</p> <p>Philadelphia Fire Works. 80</p> <p>Phillips Pressed Steel. 80</p> <p>Phillips, Wm. H. 18</p> <p>Phillips, Wm. H. 18</p> <p>Phos. Bronze Smelt. Co., Ltd. 6</p> <p>Pickering Governor Co. 6</p> <p>Piedmont Electric Co. 113</p> <p>Pittsburgh-Buffalo Co. 42</p> <p>Pittsburgh Feed Wtr. Heat Co. 82</p> <p>Pitt &amp; Co. 82</p> <p>Plymouth Cordage Co. 82</p> <p>P. O. Box, No. 116. 79</p> <p>Ponchartraine Coke Co. 2</p> <p>Power Specialty Co. 5</p> <p>Powhatan Air Mfg. Co. 35</p> <p>Preacher &amp; Holman. 14</p> <p>Price Machinery Co., S. M. 97</p> <p>Prouit, F. 18</p> <p>Pulsometer Steam Pump Co. 102</p> <p>Ralston, C. A. 83</p> <p>Randle Mch. Co. 10</p> <p>Raymond Bros. Impact Pul. Co. 101</p> <p>Raymond Concrete Pipe Co. 26</p> <p>Raymond Mfg. Co., Ltd. 91</p> <p>Read, Warren B. 18</p> <p>Recon Company, The. 18</p> <p>Reinforced Concrete Pipe Co. 6</p> <p>Reliance Machine &amp; Tool Wks. 95</p> <p>Reliance Tool Co., Ltd. 95</p> <p>Remington Machine Co. 10</p> <p>Republic Iron &amp; Steel Co. 31</p> <p>Reuter-Jones Mfg. Co. 78</p> <p>Rhodes, L. 78</p> <p>Richardson Co., Inc. 115</p> <p>Richmond Electric Co. 92</p> <p>Richmond Forgings Corp. 99</p> <p>Richer Electric Co., Eugene L. 79</p> <p>Riley Dyno &amp; Engine Co. 113</p> <p>Rife Engine Co. 105</p> <p>Ritter-Conley Mfg. Co. 37</p> <p>Riverside Steel Casting Co. 82</p> <p>Riverton Iron Works, Inc. 82</p>	<p><b>S</b></p> <p>Sachsenmaier, George. 81</p> <p>Saco &amp; Pettee Machine Shop. 109</p> <p>Safety Car Heat &amp; Light Co. 113</p> <p>Saginaw Mfg. Co. 16</p> <p>Salem Foundry &amp; Mch. Wks. 13</p> <p>Samuel, Frank. 80</p> <p>Sanders' Sons, D. 93</p> <p>Savannah Bag Co. 79</p> <p>Savannah Blow Pipe Co. 41</p> <p>Savannah Loco. Wks. &amp; Sup. Co. 83</p> <p>Scaife &amp; Sons Co., W. B. 20</p> <p>Scherzer Roll Lift Bridge Co. 33</p> <p>Schmerl &amp; Co., Herman. 2</p> <p>Schofield &amp; Sons Co., J. S. 5</p> <p>Schrieber &amp; Sons Co., L. 30</p> <p>Scott Engineering Co. 100</p> <p>Scott Mfg. Co. 80</p> <p>Scott Roofing &amp; Mfg. Co. 36</p> <p>Scott &amp; Williams. 109</p> <p>Seaboard Air Line Railway. 112</p> <p>Selden-Breck Construc. Co. 19</p> <p>Sellers &amp; Co., Inc. 75</p> <p>Senter Manufacturing Co. 9</p> <p>Seyfert Sons, Inc., L. F. 79</p> <p>Shand Engineering Co. 18</p> <p>Shaw Co., Benjamin F. 19</p> <p>Shelby Steel Tube Co. 9</p> <p>Sinclair Tube Co. 9</p> <p>Shepherd Engineering Co. 4</p> <p>Shields, W. S. 109</p> <p>Shimer &amp; Sons, Samuel J. 107</p> <p>Sibley-Menge Press Brick Co. 75</p> <p>Simons-Maynard Co. 19</p> <p>Simpson Roofing Co. 39</p> <p>Sinclair Laundry Mach' Co. 102</p> <p>Sinclair-Scott Co. 15</p> <p>Sinclair's Roofing Co. 97</p> <p>Sirrine, J. E. 19</p> <p>Slade &amp; Swift. 19</p> <p>Smead, W. H. 19</p> <p>Smith &amp; Co., Inc. 103</p> <p>Smith Co., S. Morgan. 103</p> <p>Smith Co., The T. L. 27</p> <p>Smith Machine Co., H. B. 108</p> <p>Smith Co., S. R. 19</p> <p>Snead Architectural Co. 14</p> <p>Solomon-Norris Co. 19</p> <p>Somerset Coal Co. 97</p> <p>Soule Steam Feed Works. 108</p> <p>South Bend Machine Mfg. Co. 26</p> <p>Southeastern Lumber Co. 22</p> <p>Southern Blower &amp; Mfg. Co. 41</p> <p>So. Credit &amp; Collection Assn. 72</p> <p>Southern Crocking Co., Ltd. 35</p> <p>Southern Engine &amp; Boiler Wks. 8</p> <p>Southern Hydraulic Const. Co. 20</p> <p>Southern Iron &amp; Equipment Co. 82</p> <p>Southern Pacific Co. 88</p> <p>Southern Pipe Covering Co., Inc. 8</p> <p>Southern Railway Co. 111</p> <p>Southern States For. Co. 22</p> <p>S</p>
---	---	--	--	---	---	--



109  
20  
97  
35  
72  
17  
102  
82  
9  
18  
113  
42  
42  
24  
78  
107

16  
61  
13  
18  
22

40  
81

81  
109  
113  
15  
13  
80  
93  
71  
41  
89  
20  
33  
5  
30  
80  
35  
100  
12  
19  
89  
9  
79  
18  
19

4  
18  
67  
75  
19  
39  
02  
15

97  
19

4

03  
27  
06  
19  
20  
19  
97  
06  
28  
22  
41  
72  
38  
6  
20  
82  
88

11

11  
22  
06  
88  
4  
89  
15  
02  
97  
19  
24  
87  
75  
40  
41  
03  
82  
75  
20  
18  
91  
3  
78  
22  
18  
90

42  
05  
41  
18  
32  
99  
13  
78  
08  
2

11  
99  
01  
92  
30  
80  
92  
11

77  
69  
99  
14  
35  
88  
5

15  
8  
84  
4  
80

71

6  
67  
22